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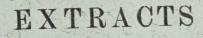
Government **Publications**

DEPARTMENT OF THE INTERIOR, CANADA

IB 46 -16836 HON. W. J. ROCHE, Minister; W. W. CORY, Deputy Minister

TOPOGRAPHICAL SURVEYS BRANCH

E. DEVILLE, LL.D., Surveyor General



FROM

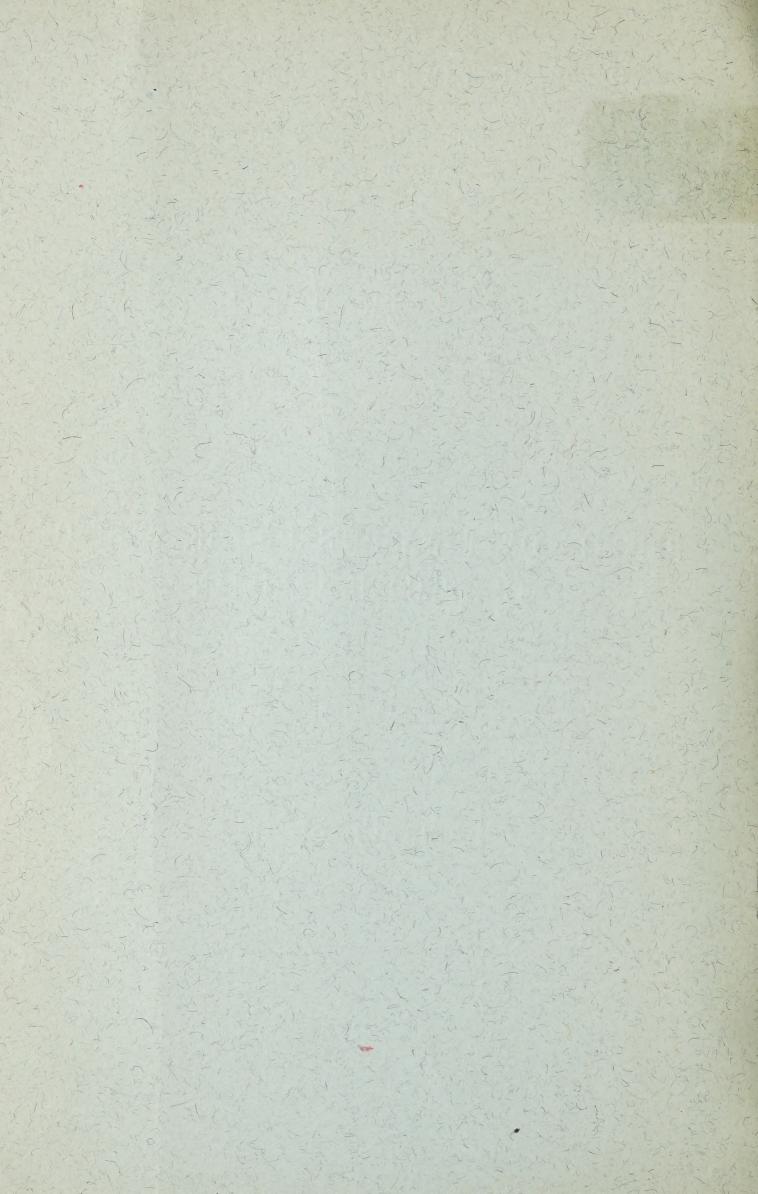


REPORTS ON TOWNSHIPS 1 TO 16, WEST OF THE SECOND MERIDIAN

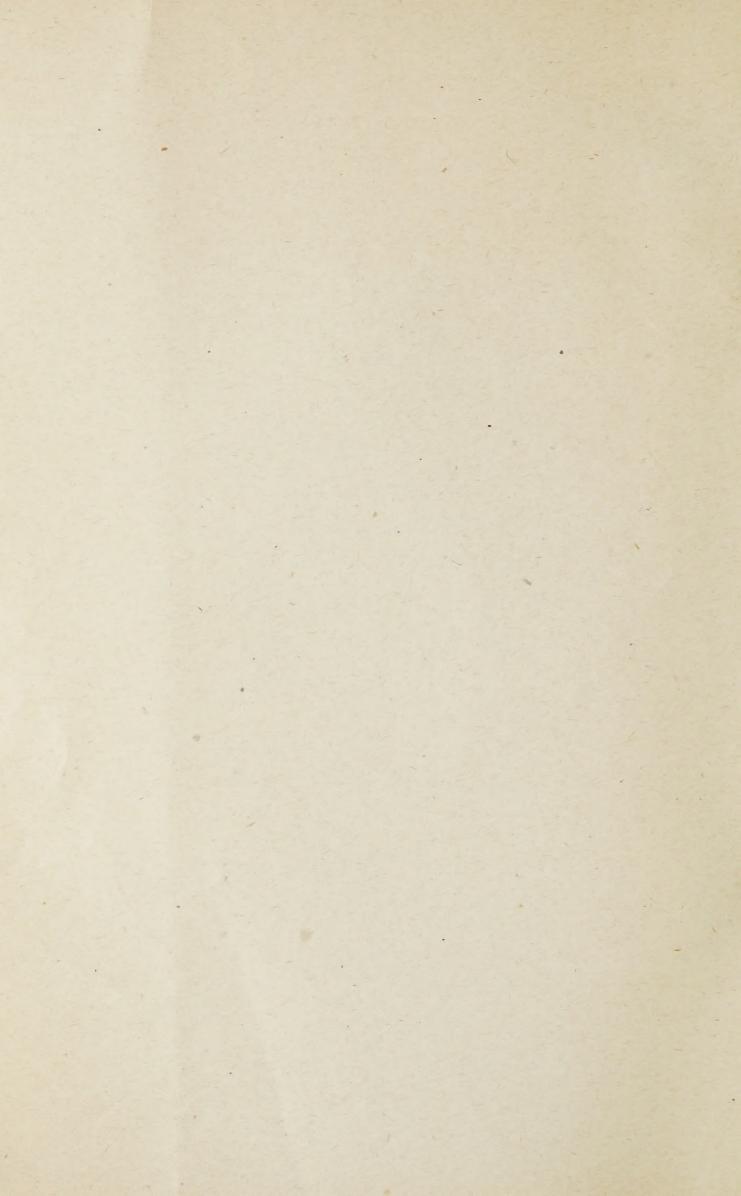
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EXTRACTS

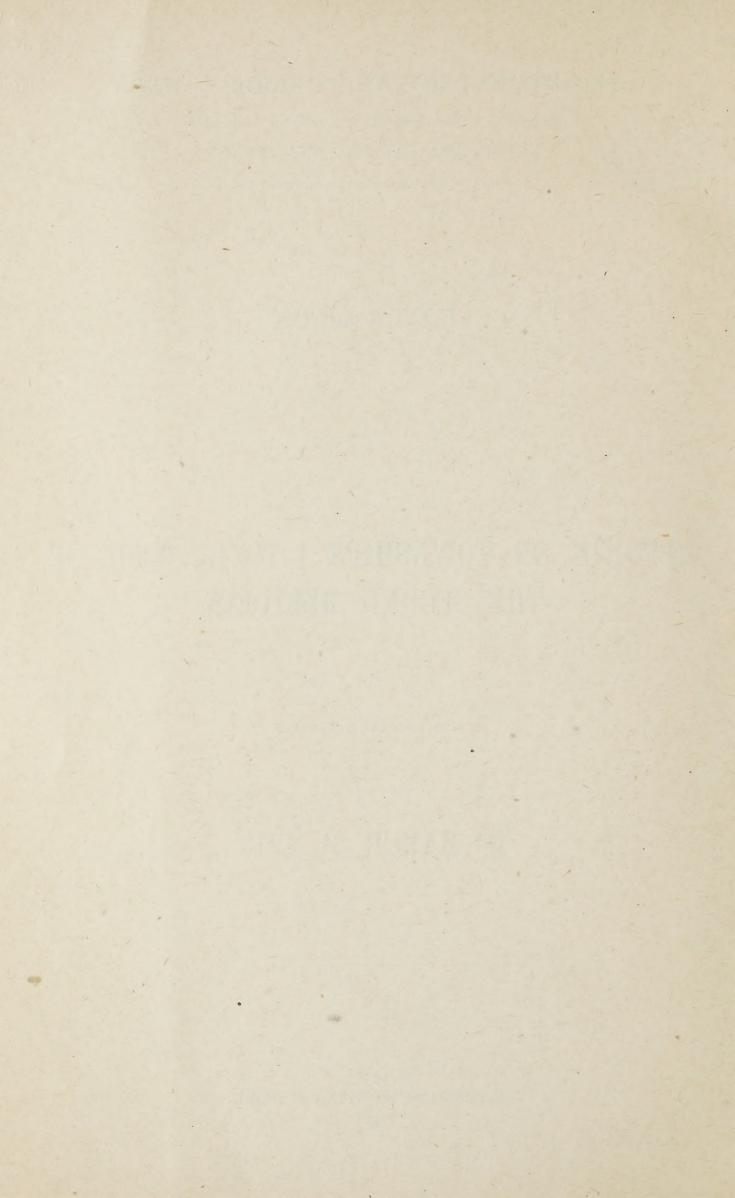
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NOTICE.

The descriptions of townships and township outlines contained in this pamphlet have been taken from surveyors' reports on file in this office. All reports received to March 31, 1915, are included.

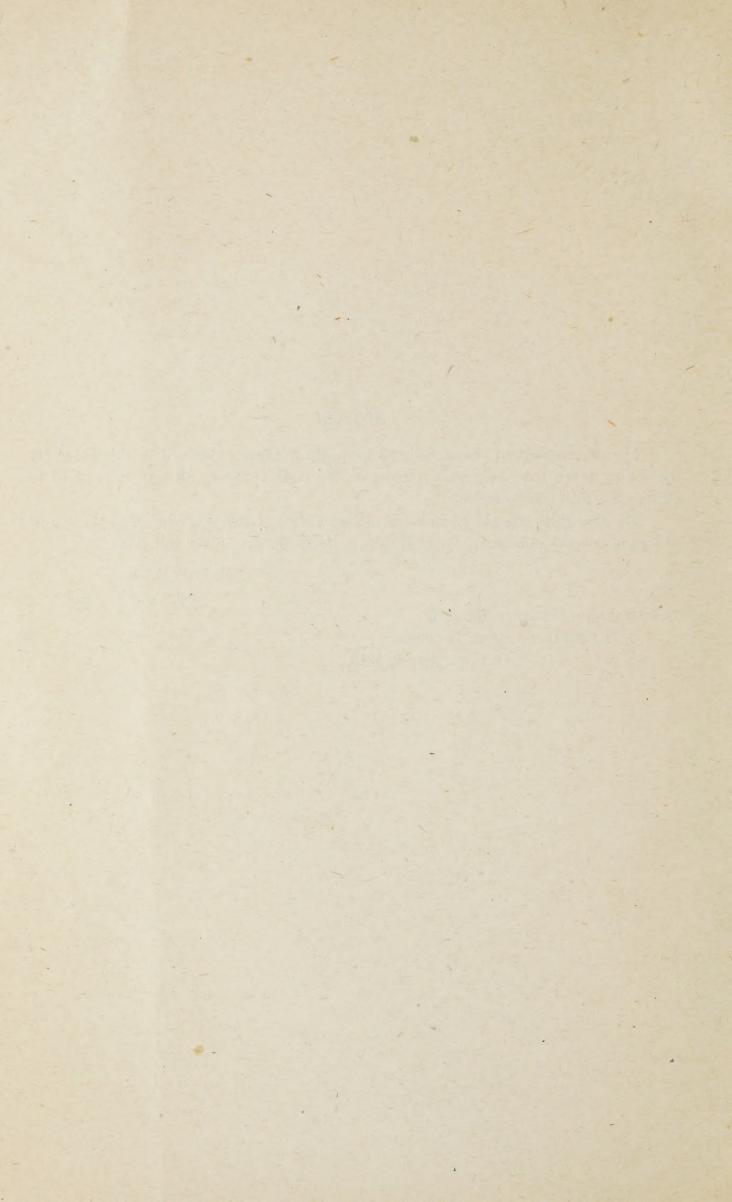
The townships are placed in ranges, the number of the range being at the top of the page and the number of the township in heavy figures on the left side.

E. DEVILLE,
Surveyor General.

Topographical Surveys Branch,

Department of the Interior,

Ottawa, May 9, 1916.



RANGE 1.

(North and west outlines.)—These lines run through a rolling prairie which is devoid of timber and has a black, gravelly loam soil of first-class quality. There is a large marsh in the west of section 31 and small ones are met with in nearly every section.—T. S. Gore, D.L.S., 1881.

(East and south outlines.)—The country along the eastern boundary is undulating and broken, while that along the southern outline is rolling. The soil all along these lines may be rated as second-class. There is a creek in section 4, but generally water is scarce. There is no timber.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is mostly undulating prairie, broken by occasional ravines. The soil generally is of good quality although stony in places. Water is abundant and of good quality.—Sinclair and Francis, D.L.S., 1881.

(North and east outlines.)—The country traversed by these lines is generally 2. all rolling prairie with a fair soil of second-class quality. The Souris river crosses the northern part of the township by a circuitous route and along its course there are numerous ravines running into the valley. In several places along the river there are clumps of elm and maple and in some of the adjoining ravines small poplar is found. There is a creek in section 34 which is fringed with poplar and willow.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is mostly prairie with numerous hay meadows and should be suitable for agriculture, especially in the southern portion. The north-eastern and northwestern corners are somewhat broken by the valley of the Souris river and the ravines running to it. The soil is a light clay loam. Water is plentiful and grass very luxuriant. There is a fair supply of wood along the river, which would be fit for fuel.—A. L. Poudrier, D.L.S., 1881.

(North, south and west outlines.)—Along the northern boundary the country is mostly prairie with a few small marshes and a good black loam soil. No timber was seen. The southern boundary runs over a rolling prairie with a soil of third-class quality which becomes very stony towards the east. The Souris river is crossed on the west half of section 1 and again near the east limit of section 4; its average width is fifty yards and its banks are wooded with oak, ash, elm and poplar. Along the western outline the land is rolling and undulating and varies from second-class in the northern portion to third-class in the south. Small marshes occur at intervals but generally the land is dry and stony.—T. S. Gore, D.L.S., 1881.

(East outline.)—This line traverses an undulating prairie with many gravel ridges and hay marshes. The land is of second-class quality.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is for the most part gently rolling prairie, broken on the south by ravines and the Souris river and on the north by marshes. The soil is of third-class quality being generally sandy and gravelly. There are some patches of timber along the Souris river.—J. A. Carbert, D.L.S., 1881.

(North outline.)—The country along this line is undulating prairie with numerous small ponds and marshes. The soil is a brownish clay loam with a clay subsoil and, with the exception of parts of sections 36, 34 and 31, is all of first-class quality. A creek about 5 feet wide is crossed in section 36.—

J. McLatchie, D.L.S., 1881.

RANGE 1-Continued.

(East outline.)—This outline is devoid of timber. It runs over an undulating prairie with some gravel ridges and hay marshes and might be rated as second-class land.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is open prairie with a good clay soil, but is somewhat broken by a number of sloughs and ponds.—P. Burnet, D.L.S., 1881.

(North outline.)—This line runs over a rolling prairie with numerous grassy marshes and ponds. The soil is a dark loam, mixed in places with gravel, and is well suited to the growth of cereals. Auburnton creek flows from north to south through the centre of the township and is a fine stream of clear water about seven yards wide and two feet deep. Moose Mountain creek, a stream of excellent water about thirty-five yards wide, flows southerly through the northwest corner in a low valley. Near this creek there is an old cart trail from Fort Ellice. Hay marshes and wet meadows occur all along the line and the land varies from first-class to second-class. The soil in general is clay loam.—T. Fawcett, D.T.S., 1881.

(East outline.)—The land along this line is rolling, or level prairie, and is of second-class quality throughout. Hay marshes occur in every section except section 12, and the land is devoid of timber.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is sufficiently undulating for drainage purposes. The soil is of excellent quality, and there is an abundance of good water in Moose Mountain creek, which flows southerly through the township.—J. Warren, D.L.S., 1881.

(North outline.)—For the first three miles, going west on this line, the land consists of rolling prairie with a first-class soil, somewhat stony in places. Auburnton creek, a stream of good water averaging twenty feet in width and three feet in depth, crosses the line in section 33 flowing south. In sections 32 and 31 the surface is rolling, undulating and broken, with soil of first- and second-class quality. An old cart trail from Fort Ellice crosses the line in section 31. Numerous wet meadows are encountered all along the line.—T. Fawcett, D.T.S., 1881.

(East outline.)—The country along this line is all rolling prairie with numerous gravelly ridges and hay marshes. The land may be rated as second-class, and is devoid of timber.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is all open prairie except some small patches covered with silver poplar scrub. A few large ponds of good water were met with, and there is some very good hay land. The soil is a clay and sandy loam, with a subsoil of clay and sand, and some limestone gravel.—D. C. O'Keeffe, D.L.S., 1881.

(North outline).—The surface, as seen from this outline, is all rolling prairie 7. with numerous large ponds. The sections on the western part of the line contain first-class land, while those on the east are rated as second-class. The line is crossed by a creek in section 31 and by another in section 35. These creeks contain good water. They vary in width from twelve to sixteen feet, and in depth from one to one and a half feet. The current in each is from three-quarters of a mile to one and one-half miles per hour.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is level or rolling prairie, well watered by numerous small streams. The soil is a rich, black, sandy loam.—S. Brodie, D.L.S., 1882.

RANGE 1—Continued.

(North outline.)—The country along this line is undulating prairie, with a fairly good farming soil, and having scattered bluffs of poplar and a number of good hay marshes. On the tops of the elevations the soil is mixed with gravel and large boulders are scattered over the surface. Generally the land may be rated as second-class. The line is crossed by a creek in section 32 and by another in section 34. These creeks contain good, clear water and are each about six feet wide and eighteen inches deep with rapid current. Several other small rivulets flowing southerly are met with along the line.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie covered with spear grass. There are a few bluffs of willows and small poplar, and occasional creeks and ponds. The soil is a sandy loam.—J. Stewart, D.L.S., 1881.

(North outline.)—Along this boundary the country is low, wet prairie with numerous hay swamps and clumps of small poplar and willow. The soil in the eastern portion consists of sandy loam of second-class quality, while along the remainder of the line it is light, becoming gravelly towards the west. The road to Fort Ellice crosses section 34.—M. Hart, D.L.S., 1881.

(East outline.)—This line traverses a rolling prairie with stony ridges and frequent ponds of water. The soil is sandy loam; it is light in places and usually of second-class quality. The timber has been mostly burnt.—A. C. Webb, D.L.S., 1879.

(Subdivision.)—This township is undulating prairie. The soil is of first-class quality, being a loam overlying a clay subsoil. In sections 30 and 31 some large timber was found and scattered throughout the remainder of the western half there are numerous bluffs of poplar. In the eastern part of the township there is no timber of consequence. The water in most of the ponds is unfit for use, but fresh water is found in two creeks flowing through the northwestern portion of the township. The land is not generally stony, although there is some limestone which produces, when burnt, a good quality of lime.—J. A. MacMillan, D.L.S., 1881.

(North outline.)—Antler river, a fine rapid stream, crosses this boundary in **10.** section 31. The soil averages second-class throughout, being rather gravelly in the east and a fair sandy loam in the west. The surface is slightly undulating, and in the western part especially there are numerous ponds, marshes and poplar bluffs.—M. Hart, D.L.S., 1881.

(East outline.)—The country along this line is undulating prairie with frequent ponds. The soil is a light, sandy loam of second-class quality.—A. C. Webb, D.L.S., 1879.

(Subdivision.)—This township consists generally of rolling prairie, broken by a few low ridges. The soil is sandy overlying a clay subsoil in places, and may be rated as second-class and third-class. About one-third of the surface is marshy and, with the exception of sections 5, 6, 7, 8, 17 and 18, the township is suitable only for grazing. There is considerable small poplar suitable for fencing throughout the township, and in the southwest corner there is some of fairly large growth.—L. G. Garon, D.L.S., 1881.

(North and east outlines.)—The northeastern portion of the township is 11. densely wooded with poplar and scrub, among which there is some large timber suitable for building purposes. This bush extends westward for about three miles and southward as far as Little Pipestone creek which crosses section 13. Near the point where this creek crosses the east outline there is an excellent mill site. The soil is of first-class quality.—J. G. Sing, D.L.S., 1881.

RANGE 1—Continued.

(East outline.)—The country along this line is rolling and densely covered with poplar and scrub. Occasional swamps occur. The soil is a sandy loam of first-class quality. Little Pipestone creek, which crosses section 13, contains good water but is very shallow.—A. C. Webb, D.L.S., 1879.

(Subdivision.)—This township is rolling prairie with a dark, clay loam soil. There is considerable marsh land but this could be easily drained. There is sufficient timber for the requirements of settlers. The township is well adapted to stock-raising.—J. McAree, D.T.S., 1881.

(North and east outlines.)—The land along the north outline is first-class, consisting of rolling prairie very well adapted to either farming or grazing. The soil consists of clay loam with sand in places. Throughout sections 33 and 34, and part of sections 32 and 35 there are many bluffs of poplar with scrub. Ponds and marshes are found all along this line. Along the east outline the country consists of stony ridges and ravines with occasional swamps. The surface is covered with thick willow and poplar scrub with considerable dead, fallen and burnt timber. The soil is a light sandy loam of second-class quality.—A. C. Webb, D.L.S., 1879.

(East outline.)—The southeastern portion of this township is densely wooded with poplar and scrub. The remainder is rolling prairie with an excellent soil, and is admirably adapted to farming or grazing.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is chiefly rolling prairie, there being only a few small groves of poplar and some patches of dead timber. The soil is first-class, consisting of a rich clay loam mixed with limestone gravel in places. There are some granite boulders which would be useful for building. Most of the ponds and marshes contain good fresh water, although in sections 16 and 17 there is a lake (Charles lake) in which the water has a somewhat salty taste.—E. C. Caddy, D.L.S., 1881.

(North and east outlines.)—The country along these lines is gently rolling prairie with numerous clumps of small poplar and dense willow, especially along Pipestone creek. This stream, which is about five feet deep and contains fresh water, flows through a valley varying from one-quarter to one-half mile in width and from 100 to 150 feet in depth. The timber is of larger growth along the south bank of the creek than elsewhere, the trees averaging about five inches in diameter. The soil consists of a good, dark, sandy loam, and in some places a clay loam mixed with limestone gravel. The subsoil is clay throughout. Small ponds and marshes are numerous.—A. F. Cotton, D.L.S., 1881.

(East outline.)—The northern portion of this line runs over rolling prairie while towards the south the land becomes quite hilly. Frequent bluffs of scrub are met with all along the line and small ponds and marshes are numerous. The soil is a sandy loam of first-class and second-class quality. Pipestone creek, which crosses section 36, is about two feet deep, has a slow current and contains good, cold water. There is another creek containing good water in section 12.—A. C. Webb, D.L.S., 1879.

(Subdivision.)—The central and easterly portions of this township are well adapted to farming purposes, consisting of level prairie with an alluvial soil about ten inches deep overlying a light clay subsoil. The northern portion of the township is much broken by the valley of Pipestone creek. Some settlers have already squatted in this township.—J. J. Francis, D.L.S., 1882.

(North outline.)—The country along this line is open prairie with a good clay loam soil of first-class quality. There are numerous ponds and marshes in the eastern part.—A. C. Thomson, D.L.S., 1881.

Range 1—Concluded.

(East outline.)—Along this boundary the land is rolling with numerous swamps and occasional bluffs of poplar and willow scrub. The soil is a light, sandy loam of first-class and second-class quality.—A. C. Webb, D.L.S., 1879.

(East, south and west outlines.)—The surface of the southwestern portion of this township is for the most part wooded. Pipestone creek enters in the north half of section 7 and flows southeasterly through a valley varying from one-quarter to one-half mile in width and from 100 to 150 feet in depth. Along the south bank of this stream the timber is of larger size than elsewhere in this vicinity. The surface of the east part of the township and along the west boundary, north of Pipestone creek is gently rolling prairie with occasional small ponds and marshes. In sections 1, 19 and 24 there is some timber. The soil, generally, is a good, dark, sandy loam over a clay subsoil. In the western part of the township, however, there is considerable clay loam, and in the eastern portion the soil is mixed with gravel in places. There are numerous small ponds and marshes in the northwest quarter.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The trail to Fort Ellice runs in a northeasterly direction through this township. The surface is undulating prairie somewhat broken by the valley of Pipestone creek. The land is of fair quality, and there is plenty of wood for fuel and fencing. A few swamps are scattered throughout the township.—A. Hamel, D.L.S., 1881.

(North outline.)—Along this outline the surface is rolling prairie, with a good clay loam soil of first-class quality. Towards the east there are numerous ponds and marshes.—A. C. Thomson, D.L.S., 1881.

(East outline.)—This line runs through rolling land with occasional gravelly ridges. The soil consists of sandy loam, and may be rated as first-class and second-class. Bluffs of poplar and willow scrub were frequently seen, and scattered swamps and patches of poorer soil were encountered towards the south.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie with patches of willow and poplar and also considerable swamp. The soil consists of sandy loam, and is well suited for farming—Burchill and Davies, D.L.S., 1881.

(North outline.)—This line runs through undulating country. There are many poplar bluffs and considerable willow scrub. Numerous pond-holes were seen. The soil is of second-class quality.—W. Pearce, D.L.S., 1881.

(East outline.)—The country along this line is rolling prairie and may be rated as first-class. There is some poplar and willow scrub, and also a few small marshes.—A. L. Russell, D.L.S., 1876.

Along this line the land is rolling prairie with a sandy loam soil of first-class quality. Poplar and willow scrub occurs and some marshes were seen.—A. C. Webb, D.L.S., 1879.

(Subdivision.)—The soil in this township is very rich, but the surface is somewhat broken by ponds and water-holes. There is a small quantity of building timber but most of the timber is suitable only for fencing and fuel.—S. L. Brabazon, D.L.S., 1882.

RANGE 2.

(North and east outlines.)—Along the north boundary the surface is rolling prairie. Section 31 is scattered, in the eastern half, with limestone boulders, and broken, in the western half, by the Souris river, which is about fifty yards wide, and sparsely wooded along the banks with small elm and ash trees. The

Range 2—Continued.

soil in the four western sections is a gravelly loam of first-class quality. Along the eastern boundary there is a black, gravelly loam of first-class quality, and small marshes occur in nearly every section There is no wood.—T. S. Gore, D.L.S., 1881.

(South outline.)—The country traversed by this line is rolling prairie of second-class quality, with the exception of sections 4 and 5 which are somewhat stony. The River of Lakes which is 514 yards wide is crossed in section 4.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is rolling and undulating prairie, and should make excellent agricultural land. The soil is a rich, deep, black mould, free from stones. There is a lake in sections 4, 5 and 7 containing good water, and also a fair distribution of marshes throughout.—Sinclair and Francis, D.L.S., 1881

(North outline.)—This boundary crosses rolling prairie with a soil of secondclass quality. The Souris river crosses the line twice, northward in section 36 and southward in section 32. In the latter section there are a number of ravines with creeks leading to the river. In section 34 there is a ravine wooded with poplar and containing a creek which flows northerly.—W. Pearce, D.L.S., 1880.

(East outline.)—The country along this line consists of rolling prairie with a gravelly loam soil of first-class quality except in section 25 and the adjoining half of section 24 which are broken by the Scuris river. These two sections may be rated as second-class. The Scuris river varies from fifty to one hundred feet in width. It flows southeasterly through section 36 crosses the line three times in section 25 and then turns due east. The valley of this stream is over a mile wide and the bottom is wooded with maple, oak, poplar and elm.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—The eastern portion of this township is rolling prairie suitable for farming purposes. The soil is of second-class quality. The northern and western portions are very hilly and broken by the Souris river and many deep ravines. The land supports a very luxuriant growth of grass.—A. L. Poudrier, D.L.S., 1881.

(North, east and south outlines.)—Section 31, the eastern half of section 33, and the western portions of sections 35 and 36 are principally rolling prairie 3. of first-class quality, the remaining sections along the northern outline are second-class excepting parts of sections 32 and 33 which are fourth-class as they are stony and broken by the valley of Moose Mountain creek. This stream is thirtythree yards wide, has a rapid current and flows southerly through the northwest corner of section 33. Section 34 has a sandy loam soil and is crossed by the Fort Ellice trail. On the eastern boundary as far south as the middle of section 13 the land is second-class the soil being a clay loam with a gravelly subsoil in section 36 and a gravelly loam over the remainder. A number of small marshes are met with along this part of the line. The remainder of the land along the southern portion of the line is stony and dry and of third-class quality. The soil along the south outline is a clay loam varying from first-class to third-class. Souris river crosses the line twice, northward in section 5, and southward in section 1. It has an average width of thirtysix yards. The banks are thinly wooded and the slopes of the valley are long and gentle and more or less stony.—T. S. Gore, D.L.S., 1881.

(Subdivision).—This township is very rough and much broken by ravines, Souris river and Moose Mountain creek, and is not considered very suitable for settlement. The soil in places is a black loam but it is mostly sandy and gravelly and of third-class quality. There is some scrubby timber along the streams.—J. A. Carbert, D.L.S., 1881.

Range 2—Continued.

(North outline.)—This line runs over undulating prairie, broken toward 4. the west by a few ravines and in sections 34 and 33 by Moose Mountain creek, which flows southerly through a stony valley about a mile in width. The creek, which has an average width of about fifty feet, and a depth of three feet, contains good water, and flows over a gravelly bed. The soil is alluvial being a brownish clay loam with a subsoil of clay. The land is all second-class with the exception of the east half of section 32 and the west half of section 31 which are first-class.—J. McLatchie, D.L.S., 1881.

(East outline.)—The surface along this line is rolling prairie with numerous small marshes and a dark, gravelly loam soil. The land is mostly second-class except in the northern portions of sections 1, 12 and 13, where it is first-class, and in section 25, where it is third-class. Moose Mountain creek runs through the central portion of the township, and is a beautiful, clear, rapid stream about forty-five feet wide.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie with a clay soil. The western half is much broken by ravines and gullies.—P. Burnett, D.L.S., 1881.

(North and east outlines.)—The land along these lines is generally rolling prairie with numerous ponds and grassy marshes. The soil consists of dark loam, mixed with gravel in places, and is well adapted to the growing of cereals. There is no wood of any kind. Moose Mountain creek, which flows in a southerly direction through a valley of over a mile in width, is about two chains wide, and three feet deep and has a swift current. An old cart trail to Fort Ellice crosses the north half of section 25.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is mostly prairie sufficiently undulating for drainage. The soil is of good quality and there is an abundance of good water in Moose Mountain creek.—J. Warren, D.L.S., 1881.

(North and east outlines.)—The surface along these lines is generally undu6. lating and rolling with first-class soil along the north outline, and the northern part of the east outline. Meadows and marshes are met with in every section except 35, 25 and 24. The soil along the southern part of the east outline is alternately of first- and second-class quality, the surface being more or less broken by the valley of Moose Mountain creek. This creek crosses the north boundary in section 35 and flows southerly near the east outline through a wide valley. The water is clear, the current rapid, and the banks high, so that it might be utilized for mill sites. No wood was seen along these boundaries.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is mostly undulating prairie. Moose Mountain creek enters the township on the north boundary of section 35 and flows southerly, leaving near the southeast corner. This stream, which is about ninety-five feet wide, affords several good mill sites and during spring freshets timber could easily be floated down from Moose Mountain. The valley of the creek is wide and deep and contains many large granite boulders. There are some good hay meadows and a few small lakes which contain good water. The soil generally is a clay and sandy loam, with a clay and sand subsoil and, in places, some limestone gravel; in general the land may be rated as second-class.—D. C. O'Keeffe, D.L.S., 1881.

(North and east outlines.)—The country along the northern boundary is first-class throughout, it being rolling in the east and undulating in the west. Along the east outline the surface is principally undulating prairie and may be rated as first-class throughout. In the south half of section 24 the line

Range 2—Continued.

is crossed by a creek of good water which is about ten feet wide and one and one-half feet deep, and has a current of one mile per hour. Two large ponds are crossed in section 36 and two more in section 12.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is level prairie, traversed by Moose Mountain creek and a tributary. The soil is a black, sandy loam of great fertility, but there is no wood nearer than Moose Mountain.—S. Brodie, D.L.S., 1881.

(North outline.)—The surface along this outline is undulating prairie with a fairly good soil which averages second-class. There are several marshes from which quantities of hay may be procured and some scattered bluffs of poplar on the slopes. A number of fresh rivulets cross the line in the western portion. The elevations are somewhat gravelly and stony.—O. J. Klotz, D.T.S., 1881.

(East outline.)—The country along this line is all of first-class quality with the exception of the north half of section 13 and the south half of section 24 which are rated second-class. Some large ponds are met with and near the southern limit of section 36 a small creek of good water, which flows easterly, was crossed.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie covered with spear grass and has a sandy loam soil. There are few bluffs of willow and small poplar. The water in the ponds and streams is good.—J. Stewart, D.L.S., 1881.

(East outline.)—The eastern tier of sections is heavily rolling and towards **9.** the north of the township there is a considerable quantity of wood and numerous ponds. Most of the township is taken up by White Bear I. R. No. 70.—M. Hart, D.L.S., 1881.

(Subdivision.)—This township with the exception of the southern and eastern tiers of sections is occupied by White Bear I. R. No. 70. The southern tier is rolling land with numerous bluffs of poplar timber in sections 1, 2 and 3. The eastern tier has also many poplar bluffs, the greater part of sections 23 and 24 and the whole of sections 25, 26, 35 and 36 being covered with heavy timber up to eighteen inches in diameter. The northern portion of the township is occupied by Moose mountain, and is consequently very hilly. The heavily timbered sections contain large lakes of fresh water, but their source of supply could not be determined. The soil is excellent for farming purposes. The northern portion is especially well adapted to grazing. The land is rated as first-class and second-class.—J. A. MacMillan, D.L.S., 1881.

(North outline.)—For the first two miles in going west along the north boundary the land is low and wet, with a sandy soil of third-class quality. The surface along the remainder of the line is rolling and covered with small poplar, cherry and willows. A few hay marshes were seen.—M. Hart, D.L.S., 1881.

(Subdivision.)—This township with the exception of sections 25, 35, 36 and portions of sections 26, 24 and 13 is very much broken by many lakes and ponds. The northeastern part is very thickly timbered with poplar, willow, hazel, etc., the poplar growing up to fourteen inches in diameter. The southern tier of sections is included in White Bear I. R. No. 70. The soil is chiefly third-class, with some second-class, and consists of a sandy loam with a sandy and stony subsoil.—L. G. Garon, D. L.S., 1882.

Range 2—Continued.

(North and east outlines.)—Along these lines the surface is rolling prairie and the soil is generally of first-class quality. A fine creek of good fresh water, about two feet deep and flowing southeasterly, was crossed in section 12.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is prairie, with a few scattered clumps of small poplar and willow. The soil is a rich, dark clay loam, but owing to the number of marshes this land is better adapted to stock-raising than to general farming.—J. McAree, D.T.S., 1881.

(North outline.)—The country along this line is rolling prairie with a rich, sandy loam soil and is well adapted to grazing. Throughout the western four miles there are many marshes, some of which are quite large, and a few small ponds.—A. C. Webb, D.L.S., 1881.

(East outline.)—This line traverses a rolling prairie with a first-class soil consisting of a rich, black mould varying from six to twenty-four inches in depth overlying a subsoil of clay or sandy loam. The district is well watered and convenient to wood, and cannot be surpassed for farming and grazing purposes.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is principally rolling prairie with a first-class soil consisting of clay loam mixed with limestone gravel. Eva lake near the centre of the township is a large fresh-water lake about five feet in depth. The water in the marshes is usually good.—E. C. Uaddy, D.L.S., 1881.

(North and east outlines.)—These lines run over a gently rolling prairie, with numerous clumps of small poplar and dense willow. The soil is usually a good dark, sandy loam, somewhat gravelly in places, overlying a clay subsoil. Marshes and ponds are numerous. The Fort Ellice trail crosses the north boundary in section 36.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The surface of this township is rolling. The northern portion has considerable poplar timber and willow brush growing in scattered groves and bluffs. The southern portion is open prairie. Grassy marshes, ponds and lakes are numerous and all contain good fresh water. The trail from Fort Ellice to Moose mountain crosses the township from northeast to southwest. The soil is a dark, clay loam, about one foot in depth, overlying a clay subsoil, and may be rated as first-class.—J. J. Mc-Kenna, D.L.S., 1882.

(North and east outlines.)—These lines run over a gently rolling prairie with occasional marshes or small ponds, and frequent clumps of small poplar and dense willow. Pipestone creek enters this township in section 19, and flows through a valley from one-quarter to one-half mile wide, and from 100 to 150 feet deep, leaving the township in section 12. Along this stream bush is plentiful and on the south bank the trees attain a larger size than elsewhere in the vicinity being about five inches in diameter. The soil is alluvial and consists of a good, dark, sandy loam, sometimes mixed with gravel, with a clay subsoil. Along the east outline there is a clay loam soil, second-class in the south half and first-class in the north half. The trail to Fort Ellice crosses the southeast corner of the township.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—This township is gently undulating with a number of deep swamps. Pipestone creek crosses it in a southeasterly direction. The soil is fair in quality and there is plenty of wood for both fuel and fencing.—A. Hamel, D.L.S., 1881.

Range 2—Concluded.

(North and east outlines.)—The country along the north outline of this township is composed of open prairie with numerous marshes and a few small clumps of poplar. The soil is a good clay loam, and where not too wet, is first-class. Along the east outline the land is open, rolling prairie with good clay loam soil. Sections 25 and 36 are somewhat marshy.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—About one-half of this township is covered with scrub, willow and scattered poplar, which is suitable only for firewood. The soil throughout is first-class.—Burchill and Davies, D.L.S., 1881.

(North outline.)—The country along this line is undulating and covered with poplar and willow bluffs. The soil is sandy loam of good quality. Some grassy ponds were encountered, and in section 34 the line crosses a sluggish stream six feet wide and one foot deep.—W. Pearce, D.L.S., 1881.

(East outline.)—This line passes through rolling prairie with a good clay loam soil. A few scattered small marshes were seen. In section 12 there is a small quantity of poplar and willow.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—The soil is a rich, deep, black loam, with a clay subsoil. This township is admirably adapted to agriculture, being well watered and timbered.—S. L. Brabazon, D.L.S., 1881.

RANGE 3.

(North, east and west outlines.)—For the first two miles, going north on the western outline, the surface is rolling with a gravelly loam soil of first- and second-class quality. From there on and along the northern boundary the country is rolling, broken, and generally very stony; it is rated all as third-class land. Along the eastern outline in section 36 the soil is a good clay loam of first- and second-class quality. For about three miles south of this section it becomes sandy. In section 12 the line crosses a lake about eighty-three yards wide and extending east and west for some distance. In the vicinity of this lake the land becomes stony and is of third-class quality. The remainder of the line runs through a rolling prairie with a gravelly loam soil. The Souris river, which runs across the northern part of the township in a wide and deep valley, enters in section 31 and leaves in section 36. The banks of the river are sparsely wooded with elm and maple.—T. S. Gore, D.L.S., 1881.

(South outline.)—Along this line the country is rolling and undulating prairie with a second-class soil. There is no wood nor water.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is much broken by the Souris river and numerous creeks, gulches, and ravines connecting with it. These are generally fringed with ash, elm, maple, and willow. Many portions of the township are densely covered with hops and other creepers and shrubs. The southwest corner is fair agricultural land.—Sinclair and Francis, D.L.S., 1881.

(North outline.)—The country along this line is rolling and undulating prairie, with a soil of second-class quality. In section 34 there is a water-course in a deep ravine. No wood was seen.—W. Pearce, D.L.S., 1880.

(North and east outlines.)—The surface along these lines is all rolling and utterly devoid of timber. The soil is a clay loam of second-class quality except in section 1 where the surface is broken and covered with granite boulders and limestone.—T. S. Gore, D.L.S., 1881.

Range 3—Continued.

(Subdivision.)—This township is generally slightly rolling prairie, except in the southern part, where deep ravines run from the Souris river up into the first tier of sections. The soil, as a rule, is light sandy loam, and in some places would be fairly good for farming. There are a great many small points, and the grass about them is of the best quality and very luxuriant. On the whole, the township would be better suited for grazing than farming purposes.—A. L. Poudrier, D.L.S., 1881.

(North and east outlines.)—The north outline traverses a rolling prairie 3. with a clay loam soil which is generally stony and gravelly and of second-class quality. Along the east boundary the soil is a clay loam of first-class quality, except in parts of sections 24 and 25 where it is second and third-class. There are numerous small marshes along the central portion of this line.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is not attractive for settlement as it is much broken by deep marshes and is totally devoid of timber. The soil is very sandy and of third-class quality.—J. A. Carbert, D.L.S., 1881.

(North outline.)—The country along this line is undulating prairie, with **4.** a brownish clay loam soil over a clay subsoil. Section 33, the eastern half of section 34, and the western part of section 31, are broken by portions of a long, winding, deep coulée, and may be rated as second-class land. The balance of the land along the line is first-class. One or more small ponds or hay marshes occur in every section.—J. McLatchie, D.L.S., 1881.

(East outline.)—This line traverses a rolling prairie with a clay loam soil of first-class quality. Small marshes occur at long intervals along this line. No wood was seen.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is prairie, with a clay loam soil, and broken by gravelly knolls and sloughs.—P. Burnett, D.L.S., 1881.

(North and east outlines.)—The surface of this township appears to be all rolling prairie. Along the north outline the soil is a dark loam and is rated first-class except in sections 35 and 36 where it is second-class. Along the eastern boundary there are a few deep ravines, and the soil generally is a clay loam with a clay subsoil. The land is of first-class quality except in section 36. Water is scarce and there is no wood in this vicinity.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is principally prairie with a number of small grassy ponds scattered throughout. The soil is clay loam.—J. Warren, D.L.S., 1881.

(North and east outlines.)—These outlines traverse a rolling and undulating prairie, with a dark loamy soil of first-class quality. Marshes occur frequently along both boundaries, but there is practically no running water. There is no wood.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all prairie, with a good deal of silver poplar, and is sufficiently undulating to admit of drainage. There are considerable areas of meadow land, and several large ponds of good water scattered throughout. The soil is a clay and sandy loam with a clay and sand subsoil which is occasionally mixed with limestone gravel. There are some gravel ridges running through the township. The land is of first and second-class quality.—D. C. O'Keeffe, D.L.S., 1881.

RANGE 3—Continued.

(North and east outlines.)—The country along the north outline is undulating and rolling and is of first-class quality throughout. In sections 34 and 35 there is a creek of good water flowing southeasterly; it averages about fifteen feet in width and two feet in depth, and has a current of about one mile per hour. Going south along the east boundary a fresh water creek runs alongside till section 25 is reached, where it crosses the line several times and then proceeds in a southwesterly direction. This creek has an average width of thirty-two feet, a depth of one and one-half feet, and a current of one and one-half miles per hour. Sections 1, 25, 36, the south half of section 12 and the north half of section 24 contain first-class land while the land along the remainder of the east outline is second-class. In section 13 there is a ravine and also a valley over a mile in width, in which there is a creek similar to the one already described. Many large ponds occur in the two southern sections. No wood was seen along this line.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is partly level and partly rolling prairie, with a soil of black sandy loam. It is traversed by Moose Mountain creek which is a rapid stream having several excellent mill sites.—S. Brodie, D.L.S., 1881.

(North outline.)—The northern portion of this township lies along the base 8. of Moose mountain. In the deep ravines between the hills there is some poplar and birch. The land is rather broken and stony for agriculture but is very well adapted to the raising of sheep. The line crosses two creeks in section 35 and one in section 32, all flowing south. Each of these creeks has a rapid current, and good water. The hills and small lakes in this vicinity give the land a very picturesque appearance. Wood Mountain trail crosses the line in section 36.—O. J. Klotz, D.L.S., 1881.

(East outline.)—This line is crossed three times in section 1 and once in section 12 by a creek of good water which flows southerly. It has an average width of six feet, a depth of one and one-half feet and a current of one and one-quarter miles per hour. The surface is level and undulating prairie with a soil of first-class quality.—C. E. Wolff, D.L.S., 1881.

(North and east outlines.)—The eastern half of the north outline of this township is in White Bear I. R. No. 70. The country is rough and hilly, and thickly timbered with poplar, balm of Gilead, and some birch, averaging four to ten inches in diameter. Section 31 is low and swampy. The soil is sandy and may be rated as third-class. The eastern portion of the township is well timbered with poplar, birch, ash, maple and a dense undergrowth of hazel. There are numerous lakes, ponds and marshes throughout. Although the soil is fair, the township is unsuitable for settlement at present.—M. Hart, D.L.S., 1881.

(Subdivision.)—The soil is a rich clay loam, but owing to the roughness of the country the land at present is suitable only for grazing purposes. The poplar timber, which covers most of the township, will be the source of supply for fuel and other purposes for settlers in the future. The water is good. There are no minerals in the township.—J. H. Ogilvie, D.L.S., 1881 and 1883.

(North and east outlines.)—This township is heavily timbered with ash, maple, **10.** poplar, white birch and a dense undergrowth of hazel. The soil is poor and light, and as about one-third of the area is covered with small lakes, ponds and marshes, it is unfit for agriculture.—M. Hart, D.L.S., 1881.

RANGE 3—Continued.

(Subdivision.)—This township is covered with a dense growth of poplar, balm of Gilead, white birch, ash and a very dense undergrowth of hazel. Some of the timber might be used for building purposes. Lakes and ponds usually containing water unfit for use, occupy about half of the entire area of the township. Sections 1 and 2 and parts of 3, 10, 11 and 12 are included in White Bear I.R. No. 70. The surface is of a heavy, rolling character. The soil is sandy with a sandy and stony subsoil, and may be rated as third-class.—L. J. Garon, D.L.S., 1881.

This township is situated on Moose mountain and is too much broken up by lakes, sloughs and hills to be fit for agricultural purposes. The soil is sandy loam about one foot deep with a subsoil of sand in the valleys and gravel on the ridges. The surface is covered with poplar of an average diameter of ten inches, some birch of about eight inches and a dense growth of hazel and willow underbrush. The water in the lakes is good. The south part of the township is broken by White Bear I.R. No. 70.—R. C. McPhillips, D.L.S., 1885.

(North and east outlines.)—Along these lines the land is composed of rolling 11. prairie with an excellent soil. Occasional ponds of water were seen. The southern portion of the township lies on the north slope of Moose mountain, and is covered with bluffs of poplar, willow and dense scrub, interspersed with ponds, lakes and marshes. The northern portion is well adapted to farming.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is prairie land, dotted with clumps of poplar and willow, and broken by ponds and marshes. The dry sections are well adapted to tillage. Some of the timber is twelve inches in diameter. There is an abundance of water.—
J. McAree, D.T.S., 1881.

(North outline.)—The north outline crosses high, rolling prairie with a rich, sandy loam soil. There are occasional hay swamps and ponds, and a few small gravel ridges. The township is well adapted to farming.—A. C. Webb, D.L.S., 1881.

(East outline.)—This township can scarcely be surpassed for agricultural purposes. The surface is a rolling prairie, with occasional ponds, and the soil consists of a rich, black mould, varying from six to twenty-four inches in depth, overlying a subsoil of clay or sandy loam. The township is well watered and convenient to timber districts.

—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The northern part of the township is rolling prairie with a few small marshes. The only timber to be had is in the small poplar groves. A small brook containing good water runs in a northeasterly direction. The water of the ponds and marshes is generally fresh. The soil is a rich clay loam slightly mixed with limestone gravel, principally on the ridges, and may be rated as first-class.—E. C. Caddy, D.L.S., 1881.

(North and east outlines.)—These outlines pass through rolling prairie with numerous small ponds and marshes. The soil consists of a sandy loam with gravel, overlying a clay subsoil. The north outline is crossed by three small creeks, two of which are on the western half of section 34 and the other about one mile farther west. There is no wood along these outlines. The east boundary of section 12 crosses the trail to Fort Ellice.—A. F. Cotton, D.L.S., 1881.

RANGE 3—Concluded.

(Subdivision.)—This township consists of rolling prairie with numerous small marshes and ponds in which the water is fresh. The soil is a sandy loam about ten inches deep overlying a clay subsoil, and may be rated as first-class.—J. J. McKenna, D.L.S., 1882.

(North outline.)—The country along the north outline is somewhat rough and is broken by Pipestone creek, a stream about twenty feet wide and four feet deep. The soil is a clay loam rating as second-class. Bluffs of young poplar and some brush are found.—A. C. Thomson, D.L.S., 1881.

(East outline.)—The surface along the east outline is usually gently rolling prairie. The alluvial soil is a good, dark, sandy loam, sometimes mixed with gravel, with a clay subsoil. A great many creeks, marshes and ponds are crossed by this line. In section 24, Pipestone creek flows in an easterly direction through a valley about half a mile wide. The northern slope of the stream is thickly wooded with poplar.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—This township consists of gently undulating land with numerous deep swamps and gullies. It is traversed by Pipestone creek. There is an abundant supply of wood for both fuel and fencing.—A. Hamel, D.L.S., 1881.

(North and east outlines.)—The north and east outlines pass through open **15.** rolling prairie, the soil of which is a good clay loam rated as first-class. The surface is covered with heavy grass. Sections 34, 35 and 36 are rough and contain a few poplar bluffs and numerous small ponds. Poplar bluffs occur all along the east outline and in places there are small marshes.—A. C. Thomson, D.L.S., 1881.

(Subdivision.)—The soil is excellent but there are many marshes. Pipestone creek runs through the southwesterly portion of this township.—Burchill and Davies, D.L.S., 1881.

(North outline.)—The north outline runs through undulating prairie with bluffs of poplar and willow scrub. A few pond-holes were seen. The soil is all first-class.—W. Pearce, D.L.S., 1881.

(East outline.)—This outline passes through rolling prairie with a good clay loam soil rating as first-class. A grassy creek is crossed in section 36. From section 13 southwards there are scattered poplar trees and underbrush with some small marshes.—A. C. Thomson, D.L.S., 1881.

(Subdivision.)—Nine-tenths of this township may be considered as adapted to farming as the soil is good and the surface is well watered and timbered. The remainder is either sand or swamp.—S. L. Brabazon, D.L.S., 1882.

Range 4.

(North and east outlines.)—The country along the north outline is principally rolling, stony prairie, and is rated third-class throughout. In section 34 the line crosses the valley of the Souris river which is about 170 feet wide at this point and bordered with small maple and elm. The land along the southern part of the east outline is of first-class and second-class quality, but towards the north it becomes very stony and is rated third-class. The Souris river crosses this

Range 4—Continued.

line in section 36, flowing through a valley about three-quarters of a mile wide with banks nearly 150 feet high. The northern part of the line is much broken by ravines and for about two miles south of the river is covered with limestone and granite boulders.—T. S. Gore, D.L.S., 1881.

(South outline.)—The surface is rolling and undulating prairie with a soil of second-class quality. There is no wood nor water.—W. Pearce, D.L.S., 1880.

(Subdivision.)—The north half of this township is much broken by large ravines running easterly into the Souris river and the surface is thickly strewn with boulders and stones. The south half is fair agricultural land.—Sinclair and Francis, D.L.S., 1881.

2. (North outline.)—No wood nor water was seen along this line. The surface is rolling prairie of second-class quality.—W. Pearce, D.L.S., 1880.

(East outline.)—The surface is bare, rolling prairie of second-class quality except the southern mile and a half which is stony. Toward the north numerous small marshes were seen.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—With the exception of a few sections in the northern part this township is not suitable for farming purposes as it is chiefly rolling prairie with light sandy loam in the higher parts and loam and gravel in the lower ones. The Souris river crosses the southwest corner. Its banks are high and support a good supply of timber. Water is abundant throughout the township.—A. L. Poudrier, D.L.S., 1881.

(North, east and south outlines.)—The country along the north outline has a sandy loam soil of second-class quality and numerous marshes scattered throughout. The western portions of sections 32 and 34 have first-class and third-class land respectively, and section 36 has a clay loam soil. The soil along the eastern boundary is a black loam. The land in sections 1, 24 and the north half of section 13 is of first-class quality, the balance being second-class. The south outline is devoid of wood and water. The soil is a clay loam of second-class quality.—
T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, totally devoid of timber, and unattractive for settlement. The soil is light, sandy loam, uniformly third-class in quality.—J. A. Carbert, D.L.S., 1881.

(North outline.)—This outline traverses a rolling prairie with numerous ponds and marshes on alluvial soil of brownish clay loam with a clay subsoil. All the land along this line is of second-class quality except sections 36 and 34 which are third-class.—J. McLatchie, D.L.S., 1881.

(East outline.)—The surface is generally rolling prairie of second-class land with numerous stony and gravelly knolls. The soil is a gravelly clay loam. There are numerous small marshes especially in the southeast. No wood was seen.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is prairie with a clay soil and broken by gravelly knolls.—P. Burnett, D.L.S., 1881.

Range 4—Continued.

(North and east outlines.)—The surface is generally rolling prairie with a fair supply of surface water in marshes and ponds. The soil is a dark loam in some places gravelly and generally well adapted to the growth of cereals. Section 34 is rated second-class, as a large portion of it is wet meadow land. There are several ravines crossing the township in a southeasterly direction and these are thickly strewn with boulders. Numerous meadows and marshes are encountered along the east boundary.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is undulating prairie with a soil of inferior quality, which is stony in places. There is no timber.—J. Warren, D.L.S., 1881.

6. (North and east outlines.)—The surface along these outlines is rolling and undulating, with a dark sandy loam soil of first-class quality. Large marshes and meadows occur in sections 25 and 13 and smaller ones are met with all along both boundaries. There are several ravines crossing the township in a southeasterly direction which are strewn with boulders. The soil is well adapted to the growth of cereals.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all prairie with much meadow land and is sufficiently undulating for drainage. The soil is a clay and sandy loam with some limestone gravel and a few boulders scattered throughout. It is of first-class and second-class quality. Good water is easily obtained and some silver poplar scrub was met with.—D. C. O'Keeffe, D.L.S., 1881.

(North and east outlines.)—Along these lines the surface is rolling prairie of first-class quality. In sections 31 and 34 the north outline is crossed by two creeks which contain good water and flow southerly. These streams are about eight feet wide and one foot deep, and have a current of about one mile per hour. Moose Mountain creek flows easterly across section 24; it is about twenty-five feet wide, and three feet deep and has a current of one and one-half miles per hour. Several large ponds are encountered on the southern part of the east outline.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is marshy in some places and is traversed by Moose Mountain creek. The soil is a good, black, sandy loam.—S. Brodie, D.L.S.. 1881.

(North outline.)—This line runs over the foot of Moose mountain in the deeper ravines of which there is some poplar and birch. The country, being rough and gravelly, is better adapted to sheep raising than to general farming. There are a number of pretty lakes among the hills, and small creeks of good water occur in sections 36, 34 and 31.—O. J. Klotz, D.L.S., 1881.

(East outline.)—The country along the east outline is undulating and level prairie and is rated first-class, except in section 36, where it is second-class. The line is crossed in this section by a cart trail to Wood mountain and in section 24 by a creek about twenty feet wide and one and one-half feet deep, with a current of about one mile per hour.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is level prairie with the exception of the north half of the northern tier of sections, which lies in the foot of Moose mountain. The soil generally is a sandy loam. Two creeks run southerly through the township from the mountain.—J. Stewart, D.L.S., 1881.

RANGE 4—Continued.

(East outline.)—The surface along the east boundary north of section 1 is broken and heavily timbered. There are numerous ponds, lakes and marshes which, in spite of the fair soil, render the township unsuitable for immediate settlement.—M. Hart, D.L.S., 1881.

(Subdivision.)—This township is almost entirely timbered with poplar. The country is very hilly and will not be suitable for any purpose other than that of grazing and not for that purpose until after the timber has been removed. There are numerous lakes, the water in which is fairly good. No evidences of minerals were seen.—J. H. Ogilvie, D.L.S., 1883.

(North and east outlines.)—This township is heavily timbered with ash, maple, birch, poplar and a dense undergrowth of hazel. The soil is poor and light and about one-third of the area of the township is broken by small lakes, ponds and marshes, rendering it unsuitable for settlement.—M. Hart, D.L.S., 1881.

(Subdivision.)—The surface is rolling and much broken, and is thickly covered with poplar, white birch, ash and very heavy underbrush, consisting chiefly of hazel, rose bushes and thorns. The timber, especially the poplar, is of good size, more particularly in the south part of the township, and can be utilized for building. The township is too much broken by ridges and lakes to be suitable for cultivation. The soil is light and sandy with a stony subsoil, and is rated as third-class—L. J. Garon, D.L.S., 1881.

(North and east outlines.)—This township is on the north slope of Moose 11. Mountain, and is covered with bluffs of poplar, willow and dense scrub. There are many ponds, lakes and marshes along these outlines. The soil is of good quality, but owing to the broken character of the surface the land is more suitable for grazing than for farming.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is broken by ridges and marshes. The dry land is excellent and the soil is a rich, dark loam, well adapted to grazing. The timber is of medium size.—J. McAree, D.T.S., 1881.

(North outline.)—The north outline passes through high, rolling prairie with a rich sandy loam soil which is well suited to farming.—A. C. Webb, D.L.S., 1881.

(East outline.)—Along the east boundary the township is somewhat broken by ponds and hay marshes. The soil is good.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township consists chiefly of rolling prairie covered with groves of poplar. Some of this poplar is suitable for building purposes. The land is very much broken by small ponds and marshes containing good water. This is especially the case towards the south of the township. The soil is a rich clay loam mixed with limestone gravel on the ridges and may be rated as first-class. There are some scattered boulders which might be useful for building.—E. C. Caddy, D.L.S., 1881.

(North and east outlines.)—Along these outlines the surface is gently rolling prairie with numerous ponds and marshes. The soil is a sandy loam and gravel overlying a clay subsoil. There is no wood.—A. F. Cotton, D.L.S., 1881.

Range 4—Concluded.

(Subdivision.)—This township consists of rolling prairie with numerous small ponds and grassy marshes. The water in the lakes, ponds and marshes is fresh. One of the lakes, situated in sections 5, 6, 7 and 8, covers an area of about 400 acres. The soil is a sandy loam about eighteen inches deep overlying a clay subsoil and is rated as first-class throughout.—J. J. McKenna, D.L.S., 1882.

(North outline.)—This outline crosses rolling prairie covered with numerous ponds and marshes. The soil consists of a clay loam, and may be rated as first-class.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—The soil is second-class. The surface is swampy, but the town-ship is nevertheless well adapted to farming.—A. Hamel, D.L.S., 1881.

(North and east outlines.)—The north outline crosses rolling prairie, with numerous ponds and marshes. The soil is a good clay loam rating as first-class. Along the east outline the prairie is open and rolling with a good clay loam soil rating as first-class. Towards the north there are a few gravel ridges covered with small poplar. Pipestone creek flowing eastward across section 1 is ten feet wide and two feet deep and has a current of five miles an hour.—A. C. Thomson, D.L.S., 1881.

(Subdivision.)—Pipestone creek flows through this township, and on either side there are many fine hay marshes. The soil throughout is excellent. There are two fairly large lakes of fresh water.—Burchill and Davies, D.L.S., 1881.

(North outline.)—The north outline of this township passes through alternating patches of prairie and marshes. The country is generally a perfect network of ponds and swamps around the margin of which is a growth of poplar and willow. The soil is good where dry.—W. Pearce, D.L.S., 1881.

(East outline.)—The soil along this line is a good clay loam and may be rated as first-class. There are numerous ponds and marshes. A small amount of willow and small poplar is found in the northeast corner.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township is not well adapted to settlement. There is a good deal of water and underscrub and the soil does not compare favorably with other townships in the vicinity.—S. L. Brabazon, D.L.S., 1882.

RANGE 5.

(North, east and south outlines.)—The country along the north outline is rolling and broken prairie, very stony and of third-class quality. Section 31 is much broken by the valley of the Souris river and by ravines running into it; the width of this river is about thirty-three feet where the line crosses. There is some wood in the valley consisting of poplar, elm, wild plum, willow and thorn. Along the east and south boundaries there is rolling and undulating prairie with a soil of second-class quality. No wood nor water was encountered on either of these lines.—W. Pearce, D.L.S., 1880.

(Subdivision.)—The south half of this township is good agricultural land. The north half is stony but contains excellent pasturage.—Sinclair and Francis, D.L.S., 1881.

Townships West of the Second Meridian.

RANGE 5—Continued.

(North and east outlines.)—The north outline runs through a rolling prairie 2. of second-class land. Water is scarce and no wood was seen. In section 36 a few hay marshes were encountered. Along the east boundary the country is rolling and stony prairie with a few gravel ridges and hay marshes. The Souris river flows easterly across the southern part of the township crossing the east boundary of section 1. The soil is rated third-class.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is not adapted to settlement. The south half is cut up by deep ravines running parallel to the river, and is devoid of grass. The other half is generally very poor, being composed of baked sandy prairie with a few patches of meadow. The valley of the Souris river is well supplied with fairly good timber, especially on the tops of the hills where it is very abundant and of the very best quality.—A. L. Poudrier, D.L.S., 1881.

(North and south outlines.)—This township is rolling prairie and generally second-class land as there are a number of stony and gravelly knolls. Along the north line there are numerous marshes and the soil is black clay or gravelly loam. Section 32 and the adjoining half of section 31 is rated first-class and the remainder of the line second-class. Along the south outline there is a gravelly loam soil of second-class quality. Wood and water are scarce on this line.—T. S. Gore, D.L.S., 1881.

(*East outline*.)—The country along this line is undulating prairie of second-class land; it has an alluvial soil of brownish clay loam overlying a clay subsoil. There are a number of small ponds and marshes but no wood.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is gently rolling prairie with numerous ponds and deep marshes and is not attractive for settlement. The soil which is generally of a barren, hard, sandy and gravelly nature, is third-class in quality.—J. A. Carbert, D.L.S., 1881.

(North and east outlines.)—The country along these outlines consists of undulated prairie with many small ponds and marshes. There is an alluvial soil of brownish clay loam which is rated first-class and second-class along the north line and all second-class along the east. No wood was encountered on either line.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with a clay soil and is broken by gravelly knolls and sloughs.—P. Burnett, D.L.S., 1881.

(North outline.)—Along the north outline there is excellent soil of a clay loam nature and an abundance of good water in scattered ponds and marshes. Section 32 is rated first-class and second-class, the western half of section 33 second-class, and the remainder along this line first-class. No wood was seen.—
T. Fawcett, D.T.S., 1881.

(East outline.)—The country along the east outline is rolling, stony prairie with soil of second-class quality. The soil is a brownish clay loam with a clay subsoil. Small ponds and marshes occur all along the line.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is good land but somewhat stony and hilly and broken in the centre.—J. Warren, D.L.S., 1881.

Range 5—Continued.

(North outline.)—The country along this line has excellent soil and an abundance of good water in scattered ponds and marshes. The surface is undulating and in general it should make good agricultural land. No wood was seen.—T. Fawcett, D.T.S., 1881.

(East outline.)—The east outline runs through undulating prairie which is somewhat stony in the south and has a soil of brownish clay loam over clay subsoil. The land is rated first-class except in the southern portions of sections 13 and 24 and the northern portions of sections 25 and 36 where it is second-class. There are numerous marshes most of which occur towards the north. There is no wood.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The north part of this township is level with some very good meadow land; the south part is undulating prairie with some silver poplar scrub. Very good water is easily obtainable by digging a few feet. The absence of timber is the only drawback. The soil is clay loam with a clay subsoil and sandy loam with a sandy subsoil, the former occupying the greater area.—D. C. O'Keeffe, D.L.S., 1881.

(North outline.)—The county along this line has a sandy loam soil overlying a clay subsoil. The surface is undulating prairie with an abundance of good water in Moose Mountain creek and scattered ponds. It should make good agricultural land. Moose Mountain creek crosses the line three times in the eastern half of section 35. It averages forty feet wide and two and one-half feet deep and flows at the rate of fifty feet a minute.—T. Fawcett, D.T.S., 1881.

(East outline.)—This boundary runs through undulating and level land of secondclass quality. The soil is a clay loam over clay. In section 36 the line crosses Moose Mountain creek, a fine rapid stream of good water about thirty-three feet wide and one foot deep. Large marshes were encountered in sections 13 and 25. There is no wood along the line but it is easily obtained in the mountain district a few miles to the north. —O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie, broken by a few marshes and traversed by Moose Mountain creek. The soil is a rich, deep, black, sandy loam.—S. Brodie, D.L.S., 1881.

(North and east outlines.)—In section 36 the foot slopes of Moose mountain are left and west of this is the great "Souris plain" which is entirely without wood. The soil is good and there is a fair supply of surface water. On the east boundary the surface is undulating with a good soil resting on a subsoil of clay. There are a number of fresh streams running from Moose mountain to Moose Mountain creek. The township generally is favourable for settlement, the land rating second-class. No wood was seen along the line. Wood Mountain trail crosses the northern part of section 36.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is a level prairie with the exception of a ridge of sand hills extending from east to west across the centre. The soil is a sandy loam. Moose Mountain creek runs from west to east across the southern part.—J. Stewart, D.L.S., 1881.

(North outline.)—The eastern three and one-half miles of the north **9.** boundary is rough, hilly country wooded with poplar from two to eight inches in diameter. The soil is sandy and may be rated as third-class. The western half of section 34 rates as fourth-class, and here there is some poplar timber

Townships West of the Second Meridian.

Range 5—Continued.

as large as sixteen inches in diameter, mixed with birch. Water is abundant. There are two large lakes immediately south of the line. The remainder of this line is in Ocean Man I. R. No. 69.—P. R. A. Belanger, D.L.S., 1881.

(East outline.)—The southern slope of Moose mountain is covered with scattered poplar and birch. This wood, however, is suitable only for fuel. There are numerous marshes and lakes.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—Parts of sections 3 and 8 and all of sections 4, 5, 6 and 7 are level prairie well adapted to farming purposes. Sections 31, 32 and parts of sections 28, 29, 30 and 33, are included in Ocean Man I.R. No. 69. The remainder of the township is hilly and consequently better adapted to grazing than agriculture. The northeasterly portion is well timbered with poplar, some of which is fit for building purposes, and the rest of the hilly part has numerous bluffs of poplar. There is considerable limestone in the hilly portion. Numerous lakes occur. These lakes contain pure water, as they are usually fed by springs. The soil is a clay loam and rates chiefly as second-class.—J. A. McMillan, D.L.S., 1881.

(North outline.)—This outline is in the Moose Mountain district. The surface along the eastern half of the line is densely wooded with poplar and scrub. Numerous small lakes and ponds were seen. The soil is rich.—

J. G. Sing, D.L.S., 1881.

(East outline.)—The surface along this line is heavily wooded and covered with numerous lakes, ponds and marshes. There is good fishing in some of the lakes. The east portion of Pheasant Rump I.R. No. 68 and Ocean Man I.R. No. 69 lie in this township. The soil is of excellent quality.—O. J. Klotz, D.T.S., 1881.

* (Subdivision.)—The land in this township is very much broken. The surface is well timbered except for a small portion in the northern sections which is semi-open prairie. The timber generally consists of poplar, ash, white birch and willow, with a dense undergrowth of hazel and rose bushes. The soil is generally sandy with a stony subsoil, though sometimes a clay subsoil, and rates as third-class. The only portion not too broken for agriculture is included in the Pheasant Rump I.R. No. 68, and Ocean Man I.R. No. 69.—L. J. Garon, D.L.S., 1881.

(North outline.)—The soil is a good sandy loam. In the hilly parts of the township the surface is covered with dense scrub and bluffs of poplar. Much of the township is a rich grassy plain, well adapted to grazing.—J. G. Sing, D.L.S., 1881.

(East outline.)—This outline is in the Moose Mountain district, and it crosses frequent ponds and small lakes, many of which have excellent water and are deep and clear. The soil is a rich sandy loam with a heavy growth of vetches and wild peas among thick small poplar, dense scrub, windfalls and a few large trees.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township consists of good land for either mixed farming or grazing, although it is marshy in some places. The water is fresh and hay is abundant. The soil is a dark clay loam. The timber is of medium size.—J. McAree, D.T.S., 1881.

Range 5—Continued.

(North and east outlines.)—The country along the north outline consists of rolling prairie with a clay loam soil and is suitable for agriculture or grazing. Two or three small marshes occur along the west half of the line. Along the east outline the country consists of high, rolling prairie with frequent small swamps. The soil is a sandy loam with occasional gravel ridges. There are some bluffs of poplar about the centre of the line, south of which the land is low, wet, and covered with much willow; but it is nevertheless excellent for grazing. In section 1 the land rises towards Moose mountain, a few miles to the south.—A. C. Webb. D.L.S., 1881.

(Subdivision.)—This township consists of rolling prairie in the north, gradually rising towards the south into Moose mountain. The south part lies entirely on the mountain and is very much broken by ponds and lakes, the water of which is generally fresh and good. There is a large quantity of poplar suitable for fuel and fencing, and also considerable fallen and standing dead timber. The soil is a rich clay loam with limestone gravel on the ridges, and rates as first-class.—E. C. Caddy, D.L.S., 1881.

(North outline.)—Along the north outline the land is gently rolling prairie with a good, dark, sandy loam soil, somewhat gravelly in places. Immediately to the south of the boundary there is a large marsh containing about 1,500 acres. Small marshes and ponds are numerous. There is no wood along this outline.—A. F. Cotton, D.L.S., 1881.

(East outline.)—This line runs through rolling prairie with numerous marshes and ponds. The soil may be rated as first- and second-class, and is fairly good for farming. It consists of sandy loam with gravelly ridges throughout the south two-thirds, and clay and sandy loam soils in the northerly third.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township consists of rolling prairie with numerous marshes and ponds. A large marsh extends across practically the whole of the north part, and an alkali flat occurs about the centre of the township. The water in the ponds and marshes is fresh. The soil is a sandy loam, six inches deep, with a clay subsoil, and is first-class except in the large marsh.—J. J. McKenna, D.L.S., 1882.

(North outline.)—The land along this outline is rolling prairie with 14. numerous marshes and ponds, and many clumps of poplar and willow. The soil is alluvial and rates as first-class. It is generally a clay loam, with an admixture of gravel.—A. F. Cotton, D.L.S., 1881.

(East outline.)—The land along this line is rolling with a clay and sandy loam soil. There are frequent swamps and ponds containing good water. The land rates as first and second-class, and is fairly good for farming. There are frequent bluffs of poplar and dense willow scrub in the northerly third of the township.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township consists of open prairie with many swamps. The soil is of excellent quality.—A. Hamel, D.L.S., 1881.

(North outline.)—This line crosses prairie covered with numerous marshes and ponds containing good water, and with many bluffs of poplar and brush. The soil in the eastern part is a light, sandy loam, rating as first and second-class. Ekapo lake which is situated in section 36 has a soft, muddy bottom and bad water. The western part of the line lies in the Weed hills, and has a light soil rating as second- and third-class.—A. C. Thompson, D.L.S., 1881.

Range 5—Concluded.

(East outline.)—Sections 1 and 12 consist of rolling land with numerous scattered clumps of poplar and willow. The land rates as second-class. Pipestone creek, which is from two to three feet deep (June), crosses section 12. For some distance to the north of this the surface is bare prairie with sand ridges. Throughout the remainder of the line the country is rolling prairie, generally open, although there are poplar bluffs to the east and a good deal of poplar to the west. This latter land rates as second-class. Ekapo lake occupies part of section 36.—W. Pearce, D.L.S., 1881.

(Subdivision.)—This township is nearly covered with poplar and willow. Pipestone creek, which flows in a southeasterly direction, contains fresh water. The soil is everywhere very good. In some places it is a sandy loam, in others a clay loam.—Burchill and Davies, D.L.S., 1881.

(North and east outlines.)—The country along the north outline consists of prairie with many grassy ponds. The soil is of excellent quality. In the central portion there are many small lakes. Ekapo creek, which is about eighteen inches deep (June), crosses section 32. The land along the east outline is rolling prairie, with many small swamps and pond holes at the north and south extremities. The soil may be rated as first-class.—W. Pearce, D.L.S., 1881.

(Subdivision.)—This township consists of prairie dotted with a few small poplar bluffs. There is plenty of splendid land, although the soil is light in places. Ekapo creek flows into Ekapo lake, along the northern shore of which there is a large muskeg. There are also several smaller lakes.—S. L. Brabazon, D.L.S., 1882.

RANGE 6.

(North outline.)—The country along this outline is rolling and broken prairie of third-class quality, being generally rough and very stony. There is some wood here and there consisting of maple, elm and poplar. Water is scarce.—W. Pearce, D.L.S., 1880.

(East and south outlines.)—For the first three miles along the east boundary, going north, there is rolling prairie, with a light soil of second-class quality. From there on it consists of stony prairie of third-class quality. Section 24 is mostly level, 25 is rolling in the south and broken by a long winding ravine and section 36 is broken by the valley of the Souris river and ravines running into it. There is a small amount of wood in the valley. The south outline crosses a rolling prairie with a light soil of second-class quality. In section 6 some creeks were crossed.—W. Pearce, D.L.S., 1880.

(Subdivision.)—The south half of this township is fine rolling prairie and should make excellent land for agricultural purposes.—Sinclair and Francis, D.L.S., 1881.

(North and east outlines.)—Along the north outline the country is prairie which is rolling in the east, undulating in the middle, and hilly in the west. The soil is of second-class quality. The three southern sections on the east line consist of broken prairie which is very stony and of third-class quality. The remaining three sections consist of rolling prairie with a light soil of second-class quality. A number of water-courses occur among the ravines in the south but most of these were dry in October. In the north of section 25 there is a pond about fourteen feet deep. There is no wood on either line and except in the east very little surface water was met with.—W. Pearce, D.L.S., 1880.

Range 6—Continued.

(Subdivision.)—This township is all rolling prairie with a light gravelly soil which is rather stony in some parts. The grass is poor and in many places nothing but the "desert cactus" is found. In the eastern part of the township there are some beds of lignite of very good quality. Over a seam of lignite in one place, there is a bed of iron ore from one to two feet thick.—A. L. Poudrier, D.L.S., 1881.

(North and east outlines.)—The north outline runs through a rolling prairie with a black, gravelly loam soil. Most of the land in the five eastern sections along the line is first-class; the remainder is second-class. Small marshes are numerous. Along the east boundary the country is rolling prairie with a black, clay loam soil which is first-class everywhere except in section 1 and the adjoining half of section 12. Water is scarce and there is no wood on either line.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is not very suitable for settlement as the land is barren and much broken by ponds and deep marshes. The surface is gently rolling, with poor pasturage and no timber. The soil is of third-class quality being of a sandy and gravelly nature.—J. A. Carbert, D.L.S., 1881.

(North outline.)—This line traverses an undulating prairie with many marshes and a few small ponds. The soil is of first- and second-class quality being a brownish clay loam with a clay subsoil.—J. McLatchie, D.L.S., 1881.

(East outline.)—The country along this boundary is rolling and has a dark gravelly loam soil. Water is very scarce and there is no timber. Section 36, the adjoining half of section 25 and the southern portions of sections 24 and 13 have first-class land, the remaining sections are second-class.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is prairie land and has a clay soil broken by gravelly knolls.—P. Burnett, D.L.S., 1881.

(North and east outlines.)—Generally, as seen from the boundaries, this township has an excellent soil, abundant and good water in scattered ponds and marshes, and an undulating surface which should prove very suitable for agricultural purposes. Along the north outline the soil is a clay loam of first-class quality. On the east outline, sections 1, 24, 25 and the north half of 13 are first-class, and the balance of the land second-class. There are numerous hay marshes, meadows and muskegs along the central sections. This district is entirely devoid of timber.—
T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all prairie land. The south part is well adapted to farming but towards the north the land becomes undulating and is suitable only for grazing.—J. Warren, D.L.S., 1881.

6. Prairie with a good soil of first-class quality which is generally clay loam. In section 32 there are some large hay marshes, and smaller ones are scattered along the lines. On the whole this should prove a good agricultural township.—

T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all undulating prairie which a little silver poplar bush. The water is good, except in the eastern portion where, in sections 24, 25 and 26, it was found to be slightly alkaline. There is some good hay land, and

Range 6—Continued.

large quantities of mushrooms were found in the season. The soil is principally of first-class and second-class quality, being clay loam with some sandy loam and lime-stone gravel and having a clay subsoil.—D. C. O'Keeffe, D.L.S., 1881.

(East outline.)—This township as seen from the boundaries has an undulating surface with a fair amount of surface water and contains a large percentage of good land. The soil in sections 1, 12, 36 and the north half of 25 is of first-class quality. Section 13, however, ranks partly first-class and partly second-class while the remainder of the land along this outline is second-class. Small marshes occur at intervals along the line.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all rolling prairie, well watered, and containing a good soil—S. Brodie, D.L.S., 1881.

(North outline.)—Along this boundary the land is second-class throughout.

8. For the first three and one-half miles, going east, the surface is level prairie, but from there on it is rolling and broken by a ravine in which there is a creek of good water that crosses the line several times in section 36. Moose Mountain creek is crossed in the east half of section 31, the creek at this point being about twenty-five feet wide, six feet deep and flowing southerly with a slow current.—

O. J. Klotz, D.T.S., 1881.

(East outline.)—This township has an undulating surface, except for a range of hills in the northeast, and contains a large percentage of good land. Moose Mountain creek, which is about seventy feet wide and three and one-half feet deep where it crosses the east outline, flows southeasterly across the township. The soil is of first-class quality except portions of sections 12, 13, 25 and 26 where it is second-class. North of Moose Mountain creek there is an extensive wet marsh and some ponds. There is no wood in the township and water, generally, is scarce.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is level prairie with the exception of a ridge of sand hills which crosses the northeast corner. Moose Mountain creek runs diagonally from the northwest to the southeast. The soil is a sandy loam.—J. Stewart, D.L.S., 1881.

- This township presents few attractions to the settler. The northern portion is included in Ocean Man I. R. No. 69. The land in the hilly parts is better suited to grazing than to agriculture. Alkali beds extend through sections 3, 4, 9, 10, 11, 12, 13, 14, 15 and 16. A few unimportant bluffs of poplar grow in the nills. Moose Mountain creek traverses the west side of sections 6 and 7. A few ponds of stagnant water occur in the hills, but the prairie portion of the township has no water whatever. The soil is decidedly sandy in the southeast portion, but in the southwest and west portions it is somewhat better, although stony in places. It rates as second-class, except in the alkaline parts where it rates as fourth-class.—J. A. MacMillan, D.L.S., 1881.
- (North and east outlines.)—These lines are in Moose mountain, and cross **10.** dense scrub and bluffs of poplar. The soil rates as first-class, and there is plenty of water. A large part of this township is occupied by Pheasant Rump I.R. No. 68.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The subdivision consists of a tier of half-sections north of Pheasant Rump I. R. No. 68. The land is heavily rolling prairie, containing many small lakes and some patches of poplar and willow. The soil is sandy with a sandy subsoil, and may be rated as second- and third-class.—L. J. Garon, D.L.S., 1881.

Range 6—Continued.

(North and east outlines.)—The soil along these outlines is a good sandy loam, and the surface of the hilly portion is covered with dense scrub and bluffs of poplar.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie, considerably broken by lakes, ponds and marshes. There is no wood except a small bluff of poplar in sections 35 and 36. The soil is generally a clay loam of an average depth of from ten to fifteen inches overlying a clay or gravelly loam subsoil, and may be rated as chiefly second-class and third-class.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this outline is rolling prairie with frequent swamps and ponds. The soil is a sandy clay loam and rates as first-class and second-class. A small creek about three feet wide crosses section 34. There are two large hay marshes in the north of section 31. The land is good for grazing or farming, but is better adapted to the latter.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land is chiefly rolling prairie. The southeast portion is occupied by Moose mountain, and has a small quantity of timber, consisting of small, green poplar and willow with fallen and standing dead timber. The latter may be used for fuel and the green poplar for fencing. The southeast part of the township contains many small ponds of good, fresh water. The soil is a rich, clay loam, mixed with limestone gravel in places, and is uniformly first-class.—E. C. Caddy, D.L.S., 1881.

(North and east outlines.)—These lines cross gently rolling prairie with numerous marshes and small ponds. The soil is a good, dark, sandy loam, somewhat gravelly in places.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie with numerous fresh-water ponds and marshes, and is well adapted to agriculture. The soil is a sandy loam about six inches deep with a clay subsoil, and may be rated as first-class.—J. J. McKenna, D.L.S., 1882.

(North and east outlines.)—The land along these outlines is generally rolling 14. prairie with numerous marshes and ponds. There are a few bluffs of timber in section 33. The soil is generally clay loam in the north and sandy loam in the south, with an occasional admixture of gravel.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—This township consists of rolling prairie with a great many grass marshes, ponds and lakes, all containing fresh water. For this reason it is better adapted to grazing than to agriculture. The soil is a sandy loam about eight inches deep, with a clay subsoil, and may be rated as first-class.—J. J. McKenna, D.L.S., 1882.

(North and east outlines.)—The country along the north outline is very much broken by poplar bluffs, marshes, willow swamps, and the valley of Pipestone creek, the bottom of which is boggy and swampy. The soil is a light sandy loam, rating as second-class and third-class. The poplar ranges from four to eight inches in diameter. Pipestone creek crosses sections 31 and 32. Sections 34, 35 and 36 are covered with brush with very few openings. The land along the east outline is level prairie covered with small poplar and willow underbrush and broken by numerous marshes and ponds. The highest point of Weed hills is in section 36. The soil is light with many surface stones, and rates as first-class and second-class. Pipestone creek, which crosses the south half of section 24, is about one foot deep, has a swift current, and contains good water.—A. C. Thompson, D.L.S., 1881.

Range 6—Concluded.

(Subdivision.)—This township is covered with clumps of poplar, willow and scrub, interspersed with balm of Gilead and hazel. The soil throughout is good, especially near Pipestone creek.—Burchill and Davies, D.L.S., 1881.

(North outline.)—This line crosses rolling prairie with a few ponds and hay swamps. The soil is excellent, and nearly all may be rated as first-class. The surface is somewhat hilly in the central portion.—W. Pearce, D.L.S., 1881.

(East outline.)—This line crosses rolling prairie with a light and gravelly soil on the ridges. Some parts are low and swampy, while others are level and sandy. Along the northern part of the line the land rates as first-class and along the remainder it rates as first-class, second-class and third-class.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—The northern third is good farming land; the centre contains numerous lakes and sand ridges; and the southern part is hilly and wooded.—S. L. Brabazon, D.L.S., 1882.

RANGE 7.

(North outline.)—The country along this outline is rolling and broken prairie which is usually very stony. In section 32 the line crosses the Souris river several times; this river is about thirty feet wide and flows southeasterly. The land in the valley of the river and also that in section 31 is second-class, the remainder is third-class. There is a small quantity of wood in the valley consisting of maple and elm.—W. Pearce, D.L.S., 1880.

(East and south outlines.)—Along the east outline the country is second-class in the southern part and third-class in the northern part where it is generally very stony. In section 1 a branch of Short creek is crossed by the east outline three times and in section 2 the main channel of the creek is crossed by the south outline. This creek varies in width from twenty to sixty feet and has a valley which is partially wooded with poplar, elm and brush. In section 25 the line is crossed several times by the Souris river and its tributary, Short creek. The river averages about thirty-eight feet in width and has steep banks. The valley is partially wooded with elm, ash, maple and poplar. Sutherland's lignite mine is in the southern part of section 25. Two small watercourses occur in section 24 and there is also one in the north of section 13 but these were dry in October.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is undulating prairie with a good soil. The Souris river runs through the north end and Short creek and a branch through the eastern portion. The banks of these streams are rocky showing veins of lignite and are fringed with wood.—Sinclair and Francis, D.L.S., 1881.

(North and east outlines.)—Along the north outline the country is hilly prairie with a few ponds and a soil of second-class quality. The land in the east is light and of second-class quality except in section 1 where it is third-class. The surface is rolling except in section 36, where it is hilly. The only wood seen, was in the valley of the Souris river. Surface water is very scarce.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is worthless for either grazing or farming purposes. Lignite was found in different places, particularly in the southern part where the seams are thicker and the lignite less friable than in most cases.—A. L. Poudrier, D.L.S., 1881.

Range 7—Continued.

(North outline.)—Section 32, the adjoining half of section 31 and the western half of section 35 have first-class land, the rest of the land along the line is second-class. The soil is a light clay loam in all except the two eastern sections where it is black clay.—T. S. Gore, D.L.S., 1881.

(East and south outlines.)—The country along these lines has a gravelly clay loam soil of second-class quality. Small marshes occur at long intervals along the east. Generally the surface is rolling and there is practically no wood and very little water.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, not well suited for settlement on account of the poor pasturage and the scarcity of timber. The soil is generally very hard and gravelly and of second-class and third-class quality.—J. A. Carbert, D.L.S., 1881.

(North outline.)—The country along this line is undulating prairie with many marshes and a few small ponds. The soil is a brownish clay loam overlying a clay subsoil and is rated first-class and second-class.—J. McLatchie, D.L.S., 1881.

(East outline.)—Sections 1, 25, 36 and the adjoining portions of 13 and 24 have first-class land; the remainder of the land along the line is second-class. The surface is rolling prairie with a gravelly loam soil except in the two northern sections where it is black loam. Small marshes occur at intervals all along the line. No wood was seen.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is prairie having a clay soil and is broken by stony knolls.—P. Burnett, D.L.S., 1881.

(North outline.)—This line runs through an undulating and rolling prairie with a clay loam soil. Sections 31, 32, 35 and 36 contain first-class land and the two intervening sections, second-class.—T. Fawcett, D.T.S., 1881.

(East outline.)—The country along the east line is fairly level and has good soil. Sections 36 and 12 and the north half of section 1 have first-class land and the remaining sections, second-class. In the central part of section 13 there is an extensive marsh about ninety-six rods wide on the line and another in section 24 which is about forty-eight rods wide. There is no wood in the township.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is prairie with a good soil but is broken in the northern part by a large marsh and several ponds.—J. Warren, D.L.S., 1881.

Secton 34 of this township is situated about six miles to the north of a branch of the Canadian Northern railway, projected between Maryfield, Saskatchewan, and Lethbridge, Alberta. The Regina to Portal branch of the Grand Trunk Pacific is also being graded within two miles of this section. The land is good, open, rolling prairie for the most part, though alkali shows in some places. The sloughs are well dried up, and quite often in midsummer there is a scarcity of good water, which is obtained from wells. Marsh hay is abundant. Wheat, oats, barley and some flax are grown. For fuel, coal has to be brought in. There are no water-powers, stone-quarries nor minerals. No game was seen.—R. C. Purser, D.L.S., 1911.

Range 7—Continued.

(North and east outlines.)—Generally, this township, as seen from the boundaries, has an undulating surface, excellent soil which is generally clay loam, and plenty of fresh water in scattered ponds and hay marshes. The land along the north outline is first-class throughout. Along the first three miles, going east, there are many meadows, marshes and a few ponds. Along the east outline the land is all first-class except the adjoining halves of sections 12 and 13 which are second-class. There are a number of small marshes along this line.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all undulating prairie with a small amount of poplar bush. It is well suited for grain growing. Good water is easily obtained by digging a few feet. The soil is principally a clay loam, but there is some sandy loam and limestone gravel; the subsoil is a very rich clay. The land is all of first-class and second-class quality.—D. C. O'Keeffe, D.L.S., 1881.

(North outline.)—The surface along this boundary is all rolling and undulating prairie with a clay loam soil. Sections 35, 36 and the eastern half of 31 have first-class land, the balance is all second-class. There is a lake, about seventeen and one-half chains wide and three and one-half feet deep in the western part of section 31, the water in which is slightly alkaline. There is some marsh land in sections 32 and 33, and an alkaline meadow in the east of 34.—T. Fawcett, D.T.S., 1881.

(East outline.)—This line runs through rolling and undulating country of first-class quality. A large marsh extends from the middle of section 24 southward about forty rods into section 13. In the south half of the former section there is a meadow and pond, and in the adjoining parts of sections 1 and 12 some good hay land exists.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie with a sandy and clay loam soil of good quality. There is plenty of hay and water in the marshes.—S. C. Brodie, D.L.S., 1881.

(North outline.)—The country along this line is level prairie of second-class quality. In section 34 there is a lake about thirteen chains long and two large lakes lie immediately north of the line opposite sections 33 and 35.—O. J. Klotz, D.T.S., 1881.

(*East outline*.)—The surface is undulating and has a clay loam soil over a clay subsoil. Sections 25, 13, 12, and the south half of section 1 contain first-class land; the remainder of the land along the line is second-class. Meadows or marshes occur in every section, except section 13.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is level prairie with a sandy loam soil. It is quite dry and free from ponds.—J. Stewart, D.L.S., 1881.

(North and east outlines.)—The land along these outlines is generally open, rolling prairie except in the northeast corner where it is somewhat broken by the western slope of Moose mountain. Moose Mountain creek crosses the line in section 12. The soil is a fair sandy loam. The whole of section 36 and the easterly two-thirds of section 35 are in Ocean Man I. R. No. 69.—J. G. Sing, D.L.S., 1881.

Range 7—Continued.

(Subdivision.)—Moose Mountain creek runs through the northeast portion of this township. Parts of sections 25, 26 and 35 and all of section 36 are included in Ocean Man I. R. No. 69. The surface is all prairie and is mostly level, and there are many lakes and marshes, all containing fresh water. The soil to the east of the creek is gravelly, and a ridge of stony hills extends from section 6 to sections 13 and 24. South and west of the creek, the soil is light and becomes more sandy as one travels away from the creek. The land is chiefly second-class, with some first-class and third-class.—J. A. Macmillan, D.L.S., 1881.

(North and east outlines.)—Nearly all of the easterly two tiers of sections is in Pheasant Rump I.R. No. 68 and Ocean Man I.R. No. 69. This portion is hilly, but west of this the surface gradually merges into rolling prairie. The soil is generally good. Poplar is found in the eastern part.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land in this township consists of rolling prairie, except in the northeast portion where it is hilly and almost barren. Pheasant Rump I.R. No. 68 and Ocean Man I.R. No. 69 occupy nearly all of two eastern tiers of sections which are generally better suited to grazing than to agriculture. The soil is generally very poor, consisting of light sand and gravel, and may be rated as chiefly third-class.—L. J. Garon, D.L.S., 1881.

(North and east outlines.)—The southeast quarter lies in the foot-hills of **11.** Moose mountain. The township is crossed by a deep ravine containing some poplar and willow suitable for fuel and fencing. The surface otherwise is generally rolling and the soil is fair. In the hilly parts there is plenty of limestone and sand suitable for building purposes.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The surface of this township is rolling prairie, broken by numerous swamps and gullies. In sections 7 and 8 there are a few patches of small poplar and willow from two to four inches in diameter. In September most of the swamps and marshes were dry. Water can easily be obtained by digging a few feet. The soil is a sandy, gravelly, yellow loam, averaging in depth from three to eight inches, and is chiefly second-class, with some first-class.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this outline is high, rolling prairie with occasional hay swamps. The soil is a sandy loam with some gravel, and may be rated as first-class and second-class. A ravine crosses the central part of section 35.—A. C. Webb, D.L.S., 1881.

(East outline.)—This line crosses rolling prairie with a fair soil. There is very little water.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The soil of this township is a clay loam with considerable gravel in places, and may be rated as first-class. The surface is rolling prairie with no timber whatever. There are a few marshes, all of which contain fresh water of good quality.—E. C. Caddy, D.L.S., 1881.

(North and east outlines.)—These lines cross gently rolling prairie with numerous marshes. The soil is a good, sandy loam, somewhat gravelly in places.—A. F. Cotton, D.L.S., 1881.

Range 7—Concluded.

(East outline.)—The country throughout the northern part is undulating prairie with a good clay soil. In the southern portion the land is hilly with a gravelly clay soil and will produce good crops.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The surface of this township is rolling or undulating prairie, very much broken by numerous small ponds and hay swamps and a few low hills. The nearest wood is distant about twelve or fifteen miles in a southeasterly direction. There are a few small creeks which dry up during the summer, and several small gullies varying in depth from ten to twenty-five feet. The soil is generally good white clay and sandy loam, about ten or twelve inches deep, and is chiefly second-class.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—The land along these lines is rolling prairie with 14. numerous small marshes, and in the eastern part there are occasional ponds. A few patches of timber occur in the northeastern portion. The soil is of good quality consisting generally of sandy loam in the south and clay loam in the north with an admixture of gravel. It is fair farming land and rates as first-class and second-class.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, very much broken by hay swamps, marshes and ponds. The soil is a clay loam from six to twelve inches deep overlying a clay subsoil and may be rated as second-class and third-class. There are numerous patches of poplar and willow fit for fuel. Good water may be had almost anywhere by digging a few feet.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—The land along the north boundary is rolling prairie with bluffs of poplar, and the soil is a clay loam rating as first-class. There is a watercourse with steep banks in the south half of section 31. Numerous marshes and ponds occur in sections 31, 32 and 33. A creek with a marshy valley crosses section 35. Along the east outline the land is level prairie with bluffs of poplar and the soil is a clay loam rating as first-class.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township is thickly covered with clumps of poplar and willow. The soil is a rich clay loam, well adapted to agriculture. The water in the swamps is fresh and good. Two small lakes were noted in the township.—Burchill and Davies, D.L.S., 1881.

(North outline.)—The land along this line is rolling prairie with very little surface water. There is a creek in section 36. The soil is good and rates as first-class.—W. Pearce, D.L.S., 1881.

(East outline.)—Along this line the land is rolling prairie with bluffs of poplar and willow. The soil is a sandy loam or clay loam, rating as first-class and second-class. There is a watercourse and several marshes and ponds in section 36. A range of hills runs through sections 24 and 25. Pipestone creek which flows through the north half of section 1 contains good water.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township is traversed by Pipestone creek. The land is fairly good, although rather rough. Many patches of timber are scattered throughout the township.—S. L. Brabazon, D.L.S., 1882.

RANGE 8.

(North outline.)—The country along this outline is rolling and undulating prairie containing third-class land throughout. A branch of the Souris river, flowing northeasterly through a narrow valley, crosses the line in section 33 and grass marshes are frequently encountered.—W. Pearce, D.L.S., 1880.

(East and south outlines.)—These lines run through a rolling and undulating prairie of second-class land. A branch of the Souris river is crossed three times in section 6; its width varies from thirteen to thirty feet and its course is northeasterly. The only wood found in this township occurs along the river.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is rolling prairie with a good average soil. A branch of the Souris river, the banks of which are lined with brush and clumps of elm, poplar and ash, runs through the township from south to north. Hops and plum trees abound in great luxuriance. Lignite was found lying along the sides of the ravines.—Sinclair and Francis, D.L.S., 1881.

(North and east outlines.)—The north outline runs through rolling prairie of second-class land, which is entirely without wood or water. Sections 1 and 12, on the east outline, are crossed by the Souris river, which is about thirty feet wide and sparsely wooded along the banks with elm and maple. Some distance south of the river there is a large lagoon. Thus far the land is all third-class and is stony on the hill tops, but from there northward it is rolling prairie with a light sandy soil of second-class quality. Water is scarce and there is no wood.—W. Pearce, D.L.S., 1880.

(Subdivision.)—This township is generally rolling prairie, but in many places is very much broken. There are deposits of lignite along a stream which enters the township in section 4 and joins the Souris river in section 15. This river flows across the township in an easterly direction. The soil in many places is stony and of second-class and third-class quality.—Poudrier and Pearce, D.L.S., 1881.

(North, east and south outlines.)—The country along the north and south outlines has a light, clay loam soil of second-class quality while along the east line the soil is a gravelly loam. There is no wood and very little surface water along these lines.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie much broken by ponds and marshes with poor pasturage, and no timber. The soil is stony and infertile, consisting of a sandy and gravelly loam of second-class and third-class quality.—J. A. Carbert, D.L.S., 1881.

(North outline.)—This outline runs over undulating prairie which has a few small marshes and ponds and a soil of brownish clay loam over a clay subsoil. The land is rated first-class and second-class.—J. McLatchie, D.L.S., 1881.

(East outline.)—The country along the east line is rolling prairie with a gravelly soil which is generally hard and stony. The land is all second-class except the south half of section 36 and the northern portions of sections 12 and 13 which are third-class. One or more small marshes occur in every section along the line.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is prairie with a good soil although somewhat stony in places.—-P. Burnett, D.L.S., 1881.

Range 8—Continued.

(North and east outlines.)—This locality, generally, is suitable for agricultural land having an undulating surface, excellent soil and good water in abundance in scattered ponds and marshes. The country along the north line has a clay loam soil of first-class quality and numerous marshes and meadows are encountered in the first two and one-half miles going east. Along the east outline the soil is also a clay loam, but the land alternates between first-class and second-class. Meadows and marshes are numerous, and in section 1 there are several ponds of good water. There is no wood on either line.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—The surface is rolling prairie with a number of small hay meadows and sloughs and a few gravelly and stony ridges. The soil is a clay loam from eight to twelve inches deep, with a gravelly clay subsoil. The land, generally, is second-class.—P. Burnett, D.L.S., 1882.

(North and east outlines.)—This district, generally speaking, has suitable agricultural land as it is well supplied with good water in numerous ponds and marshes, has excellent soil and an undulating surface. The soil is a clay loam of first-class quality along the north line and for two miles, going south, on the east line. From there on it alternates between first-class and second-class. Three meadows were crossed on section 25, a large pond and some marshes in section 13, and a narrow lake in section 12. There is no wood on either line.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is undulating prairie with some fair hay land and good water in creeks and ponds. This district is well suited for settlement, the scarcity of wood being the only drawback. The soil is a clay loam with a clay subsoil, and in some places is mixed with limestone gravel. There are some large hills in the southwest part. The land generally is of first-class and second-class quality.—D. C. O'Keeffe, D.L.S., 1881.

(North and east outlines.)—Generally this township as seen from the outlines is undulating prairie with a clay loam soil over a clay subsoil, and contains a large percentage of good land. The land along the north outline varies from first-class in the east to first-class and second-class in the west. In the eastern half of section 31, at some distance south of the line, there is a lake, and a number of small meadows and marshes occur scattered throughout. On the eastern boundary the land in the north is mostly second-class, and that in the south alternates between first-class and second-class. In section 1 there is a large grassy pond and near the northeast corner of section 25, a little west of the line, a shallow lake occurs. Small swamps, marshes or meadows, occur in all the sections except section 24.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is a rolling prairie with a few marshes scattered throughout. The soil is a rich, sandy loam, and there is an abundant supply of good water.—S. Brodie, D.L.S., 1881.

(North outline.)—The country along this line is prairie, rolling and undulating in the west and level in the east, and of second-class quality throughout. Small marshes are encountered all along the line. Moose Mountain trail crosses sections 31 and 32. No wood was seen.—O. J. Klotz, D.T.S., 1881.

(East outline.)—Sections 1 and 13 and the southern portions of sections 12 and 24 may be rated as first-class land, the remainder of the line as second-class. There is a lake between sections 1 and 12 and also a couple of marshes and a pond in the

RANGE 8—Continued.

latter section. Three large ponds occur in section 36 and some smaller ones in section 25. An old cart trail crosses the latter section. Generally speaking, this township is undulating prairie with a clayey soil and contains a large percentage of good land. —T. Fawcett, D.T.S., 1881.

(Subdivision.)—The eastern half is rolling, while the remainder is level prairie covered with spear grass. The soil is a sandy loam with a white clay subsoil. There is a small lake of good water in parts of sections 11, 12, 13 and 14.—J. Stewart, D.L.S., 1881.

(North and east outlines.)—The country along these lines is open, rolling prairie with a heavy, sandy loam soil which may be rated as first-class. The land is good farming or grazing land.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land in this township is slightly undulating with a first-class soil consisting of black loam overlying a clay subsoil. There are many lakes and marshes throughout this township; considering that there is no outlet to these lakes the water is very good, no mineral taste being perceptible. The source of supply is evidently springs.—J. Macmillan, D.L.S., 1881.

(North and east outlines.)—The north outline is broken by a range of hills lying immediately west of Moose Mountain creek. Otherwise both the north and east outlines pass through rolling prairie. Moose Mountain creek crosses the township diagonally, flowing in a southeasterly direction. The soil is generally fair.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The country adjoining Moose Mountain creek is good prairie, while in the northwest corner the land is stony and hilly. The remainder of the township is heavily rolling land. The soil may be rated as second-class and third-class, consisting of sand and gravel or sandy loam overlying a clay subsoil.—L. J. Garon, D.L.S., 1881.

(North and east outlines.)—The land along these lines is rolling prairie.

11. Moose Mountain creek and some of its tributaries cross the township. The current of this creek is slow, and the banks are low. Southwest of the creek there is a range of hills. The soil generally is fair, but some parts are very stony.—

J. G. Sing, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie throughout, and is broken by many gullies, ridges and a few large hay marshes. Moose Mountain creek flows over a gravelly bottom. The soil is generally a dark loam averaging from five to ten inches in depth overlying a clay subsoil. In places, however, it is rather stony. On the whole the township is well adapted to farming, and more especially to stock-raising.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—Along this line the country is generally high, rolling prairie, except in section 36 where it is low. The soil is generally sandy and gravelly and rates as second- and third-class. On the north boundary of section 32 there is a deep lake with banks seventy-five feet high. Along the eastern side of this lake there is quite an area of good bottom land.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling prairie with deep ravines and a few small marshes. Moose Mountain creek, a fine stream of fresh water, flows

Range 8—Continued.

in a southerly direction through the western half of the township. There is no timber whatever. The soil is a rich clay loam, with considerable limestone gravel and a few scattered granite boulders, and may be rated as first-class.—*E. C. Caddy, D.L.S.*, 1881.

(North and east outlines.)—These lines cross rolling prairie with many 13. marshes and a few small ponds. The soil is a good sandy loam, sometimes mixed with gravel. On the eastern half of section 32 there is a creek flowing south through a deep valley about one and one-half miles wide.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The surface of this township is generally rolling prairie much broken by hay marshes and ponds. The northeast portion is low and wet with numerous swamps. The south and west parts are dry land, broken by ridges and gullies. Moose Mountain creek which crosses sections 5 and 6 in a southeasterly direction flows through a gully averaging about 200 feet deep. A stream (dry in October) flowing in a southerly direction through a valley about 160 feet deep, joins Moose Mountain creek in section 5. The soil throughout the township is of good quality, being a sandy and gravelly loam overlying a clay subsoil.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—The surface along these lines is rolling prairie with numerous ponds and marshes. The soil is generally a clay loam with an admixture of gravel.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling and undulating prairie very much broken by small lakes, ponds, hay swamps and a few small hills. The soil is a good white clay and sandy loam from ten to twelve inches deep and ranks as second-class. There are a few small creeks, which dry up during the summer, and some small gullies from ten to twenty-five feet deep. The nearest wood is situated twelve or fifteen miles to the north.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The north outline crosses rolling prairie with numerous ponds and marshes. The soil is a clay loam rating as first-class.—A. C. Thompson, D.L.S., 1881.

(East outline.)—Along the east outline the country is rolling prairie with some poplar, willow and brush. The soil is a clay loam rating as first-class. A great many marshes were crossed along this outline. A small creek with high banks flows through section 36. Section 25 is almost entirely covered with bush.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling prairie, broken by a number of small lakes and ponds containing good water. The country is well adapted to grazing.—Burchill and Davies, D.L.S., 1881.

(North outline.)—The land along this line may be rated as second-class.

16. The eastern half is rough, hilly prairie, while the remainder is rolling land with many gravelly ridges. Several spring creeks (dry in June) were crossed.

—W. Pearce, D.L.S., 1881.

(East outline.)—This line crosses rolling prairie. The soil is a good clay loam rating as first-class. Two cart trails cross the line, one in section 36 and the other

Range 8—Concluded.

in section 25. There are numerous ponds and marshes in section 24. Pipestone creek which flows through sections 1, 12 and 13 is about six feet wide. The land in the immediate vicinity is considerably broken by the banks. There is a large swamp in the south half of section 1.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township is a splendid tract of land. The soil is a rich, black loam on a white, friable clay subsoil. Here Pipstone creek has its source, and expands into small lakes. The wood is good only for fuel, but there is an abundant supply.—S. L. Brabazon, D.L.S., 1882.

RANGE 9.

1. (North outline.)—The country along the north boundary consists of rolling prairie with a clay loam soil of average quality.—T. S. Gore, D.L.S., 1881.

(East and south outlines.)—These lines traverse undulating prairie which has numerous swamps and marshes scattered throughout. The soil is a clay loam, somewhat stony in places, overlying a clay subsoil and is of first-class and second-class quality. A small creek crosses the south half of section 25. The country is generally good for farming.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, having a clay loam soil with a gravelly subsoil. The district has some meadows, and fine farming land generally.—Sinclair and Francis, D.L.S., 1881.

2. (North outline.)—The country along this line is very stony, and much broken by ravines running into the river.—T. S. Gore, D.L.S., 1881.

(East outline.)—The surface is generally rolling prairie and, as a rule, very stony. Sections 24 and 25 are broken by the Souris river which has a width at this point of about twenty-six feet and flows easterly with a slow current. The land adjoining the river is very low and is usually flooded at high water. The country may be rated third-class throughout.—W. Pearce, D.L.S., 1880.

(East outline.)—The east outline traverses rolling prairie with many swamps and hay marshes. The soil is a clay loam, stony in places, with a clay subsoil, and is of second-class and third-class quality. A small creek crosses the south part of section 1, and section 24 is greatly broken by hills and ravines which slope towards the Souris river. This river contains good fresh water. Sections 25 and 36 are hilly, some of the hills being as high as 150 fleet. The northern part of section 36 contains some very good farming land which is a little stony in places.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The southwest quarter of the township is rolling prairie with fair soil; the remainder is stony, but would make first-class pasture land. The Souris river runs through the northeast quarter.—Sinclair and Francis, D.L.S., 1881.

3. (North outline.)—The country along the north*outline has a soil of clay loam. Very few marshes were encountered.—T. S. Gore, D.L.S., 1881.

(East outline.)—This outline traverses an undulating prairie with a number of marshes and patches of good hay land. The soil is a brownish clay loam with a clay subsoil. The adjoining portions of sections 36 and 35, the north of 24 and the south of 13 may be rated as first-class quality, and the remainder of the land along the line, second-class.—J. McLatchie, D.L.S., 1881.

RANGE 9—Continued.

(Subdivision.)—This township is rolling prairie. It is not well adapted to settlement although some of the northern portion has some very good land. The southern portion is much broken by ravines, and is very stony. The soil is mostly hard and gravelly and generally of third-class quality. The township is devoid of timber.—
J. A. Carbert, D.L.S., 1881.

(North and east outlines.)—Along the north outline the country is undulating prairie, with stony ridges and a brownish clay loam soil overlying a
clay subsoil. Generally speaking it is good agricultural land. The east
outline traverses an undulating prairie with numerous marshes and some ponds
scattered over the surface. The soil is a clay loam with a clay subsoil. The land is
generally very stony, rating first-class and second-class in the two northern sections
and second-class in the remainder except section 1 where it is first-class.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie of fair land although a little stony in places.—P. Burnet, D.L.S., 1881.

(North outline.)—This line traverses a rolling and undulating prairie with numerous ponds and beaver meadows and generally of second-class quality. Some large boulders were seen in the north half of sections 34 and 35 and a stony ridge occurs in the south half of the former section.—C. E. Wolff, D.L.S., 1881.

(East outline.)—The surface is undulating prairie with many small marshes and a soil of brownish clay loam over a clay subsoil. The land is rated second-class except in the south half of section 13 and the north half of section 36, where it is first-class.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie with some marshes and hay meadows and some stony and gravelly ridges. The soil is a clay loam about twelve inches deep with a clay subsoil, and is of second-class quality.—P. Burnett, D.L.S., 1882.

(North outline.)—This outline runs through a rolling prairie having a fair supply of surface water. Section 35 is very thickly strewn with surface boulders.—C. E. Wolff, D.L.S., 1881.

(East outline.)—The country along this outline is undulating prairie with many marshes and patches of hay land. The soil is a clay loam with a clay subsoil. The land is all of first-class quality except in the northern parts of sections 1, 13 and 36 where it is second-class. A creek crosses the line in the north half of section 36.—

J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, and is well suited for settlement. Small ponds containing good water are fairly numerous but very little meadow land was seen. The soil is a clay loam, mixed with limestone gravel, overlying a clay subsoil. The land is of first-class and second-class quality.—D. C. O'Keeffe, D.L.S., 1881.

(North outline.)—The surface is rolling prairie with many small ponds scattered throughout. There is a fair soil of second-class quality.—C. E. Wolff, D.L.S., 1881.

Range 9—Continued.

(East outline.)—This outline traverses an undulating and level prairie which has a good soil and is well supplied with small spring marshes. No wood was seen along the line.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie with a rich, dark, sandy loam soil. It is well watered and has plenty of hay.—S. Brodie, D.L.S., 1881.

(North and east outlines.)—These outlines run through undulating and level prairie which has an excellent soil and a number of shallow marshes but no running streams. No wood was seen. Moose Mountain trail crosses section 36.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie with a sandy loam soil and a white clay subsoil. There are some ponds containing good water.—J. Stewart, D.L.S., 1881.

(North outline.)—The land along this line is broken by sloughs, the water in which is of good quality. The soil, though good in places, is for the most part gravelly and covered with surface stones. There is no wood along the line.—F. W. Armstrong, D.L.S., 1882.

(East outline.)—Along this line the land is level and rolling with numerous small marshes. The soil rates as first-class. There is no wood.—O. J. Klotz, D.T.S., 1882.

(Subdivision.)—The land in this township is rolling prairie, better suited to grazing than to agriculture. The soil is a sandy loam or clay, and in places is somewhat gravelly. It may be rated as chiefly second-class.—J. Warren, D.L.S., 1882.

(North outline.)—Along this line the land is rolling, and is watered by a **10.** number of fresh-water sloughs. The northern half has a soil about eighteen inches deep over a bluish white clay subsoil. There is no wood along the line.—F. W. Armstrong, D.L.S., 1883.

(East outline.)—The eastern side of this township is all level prairie, with quite a number of marshes and lakes. The soil is excellent, but there are a great many boulders scattered about, and the elevated portions are gravelly.—O. J. Klotz, D.T.S., 1884.

(Subdivision.)—This township is all open prairie much broken by ponds and marshes. The eastern part is rough and hilly, particularly in the northeast corner, where there are hills about 200 feet high and irregular ridges of clay with a few inches of gravel and light soil on the surface. The township is better adapted to grazing than to cultivation. A large quantity of hay could be cut from the marshes and the supply of grass is almost unlimited.—S. L. Brabazon, D.L.S., 1882.

(North and south outlines.)—The land along the south outline is fair with a grey clay soil about eighteen inches deep. The northerly portion is rough and hilly, and has gravelly soil. There are many sloughs distributed throughout the township, all of which contain fresh water.—F. W. Armstrong, D.L.S., 1883.

(East outline.)—The surface is hilly and rolling with some low bottom land. There is a creek flowing east near the south limit of section 13. On the northern half of section 24 the line crosses an expansion of Moose Mountain creek which is

Range 9—Continued.

about 600 feet wide and has low, marshy shores. The soil is a sandy loam, with some gravel and stone, and may be rated as second-class and third-class.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is open prairie. There is a large lake in the northwest quarter extending from the north boundary of section 31 to the centre of section 21. The banks of this lake, on the east and south sides, are high, and the land along the shore in sections 31 and 32 is low, and in places wet and marshy. A stream averaging thirty-five feet in width flows from this lake in a southeasterly direction, emptying into an expansion of Moose Mountain creek in the township to the east. This creek has low banks, and its water is alkaline. The east half of the township is rough and hilly. Moose Mountain creek flows from the north through section 36 between banks from 100 to 200 feet high. Its water is also strongly alkaline. There are numerous small marshes, which when drained will furnish an abundance of hay. There is a fair growth of grass throughout the township. The soil is fairly good, but in some places is rather light. On the hills there is considerable gravel mixed with the clay. The western half is best suited to agriculture, as the surface of this portion is not so rough as that of the remainder. The soil rates as first-class and second-class.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—Sections 36 and 35 are rolling and undulating 12. prairie. The soil is a sandy loam rating as second-class. Sections 34, 33, 32 and 31 are rolling prairie with many ponds. The soil is a sandy loam which rates as first-class and second-class. A lake with good fresh water from four to six feet deep crosses the north half of section 34. The land on the north is fair for farming and grazing purposes. The east is rolling prairie with occasional swamps and ponds, with a sandy loam and gravel soil. Moose Mountain creek crosses the north half of section 1. There is no wood along these lines.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling prairie, much broken by gullies, swamps and marshes There are a few small hills, the most important one of which is situated on the line between sections 17 and 18. Most of the swamps and creeks were dry in September. Good water can be obtained almost anywhere by digging. There is no wood in the township. The soil is a dark, sandy loam averaging from eight to twelve inches deep, overlying a clay subsoil, and would rate chiefly as second-class.—Dumais and Michaud, D.L.S., 1882.

13. (North outline.)—Along this line the country is high, rolling and open prairie with an excellent soil, all rating as first-class.—F. W. Armstrong, D.L.S., 1881.

(East outline.)—The land along the east outline is high, rolling prairie, with occasional ponds. Moose Mountain creek, which flows southeast through the north half of section 1, is about two and one-half feet deep, and has a muddy bottom and a slow current. The high banks on either side of the creek cut up this part of the section considerably. The soil is sandy loam and gravel, rating as second- and third-class.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie, very much broken by Moose Mountain creek, hay swamps, marshes, ponds and ridges. The creek traverses the township from the northwest to the southeast. It has good, clear water, and a gravelly bottom. The gully in which it runs varies from 100 to 150 feet in depth. The bottom land is stony. Water can be had near the surface throughout the township. The soil is a dark, sandy loam varying from eight to twelve inches in depth over a clay subsoil, and may be rated as first-class, second-class and third-class.—Dumais and Michaud, D.L.S., 1882.

Range 9—Concluded.

(North outline.)—This outline crosses high, rolling, open prairie containing 14. numerous ponds and marshes. The soil rates as first-class. A lake and two large ponds are crossed on the northeast half of section 32, all containing fresh water. The lake extends into section 33. There is a plentiful supply of water generally. There is no wood.—F. W. Armstrong, D.L.S., 1881.

(East outline.)—This line crosses rolling prairie with frequent ponds and hay marshes. The soil is sandy and gravelly, rating as second-class and third-class. Section 13 is stony in places. A creek about two and one-half feet deep runs through section 24. Another small stream about three feet wide flows southeast through the north half of section 36.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling prairie, much broken by numerous lakes, ponds and hay marshes. The nearest wood obtainable is about twenty miles to the north. The soil is from ten to fifteen inches deep with a clay loam subsoil, and rates as first-class and second-class.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this line is rolling and somewhat broken by ponds and hills. The soil is a good clay loam rating as first-class. Part of section 32 is low land. A small creek containing good water crosses section 33.—A. C. Thompson, D.L.S., 1881.

(East outline.)—Along the southern part of the east outline the surface is rolling prairie with many ponds. The summits of the ridges are stony, and the land generally may be rated as second-class.—W. Pearce, D.L.S., 1881.

(Subdivision.)—This township is well adapted to agricultural purposes. The land is rolling prairie with very few swamps. There are a few sandy ridges, but generally, the soil is excellent. There are a few clumps of poplar and willow in the northeast part of the township.—Burchill and Davies, D.L.S., 1881.

(North and east outlines.)—The north outline crosses dry rolling prairie.

16. The east corner is occupied by the north slope of Wolf hills. The land may be rated as second-class. Along the east outline there are scattered patches of prairie and some poplar and willow. The soil is very good and rates as first-class except in the south where there are a great many pond holes, and in the north where there are gravelly ridges; in these latter parts the rating is second-class.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The soil is a rich clay loam. There is plenty of good water, and wood for fuel can be obtained in abundance from the township to the west.—S. L. Brabazon, D.L.S., 1882.

RANGE 10.

(South outline.)—This line runs through undulating prairie and crosses several marshes and ponds. The soil is a clay loam with a clay subsoil and is of second-class quality. Part of section 4 is stony.—J. McLatchie, D.L.S., 1881.

(North and east outlines and subdivision.)—This township is rolling prairie having a soil of fair average quality and many large hay marshes scattered throughout. There is no wood and very little surface water to be found along the boundaries.—Sinclair and Francis, D.L.S., 1881.

Townships West of the Second Meridian.

RANGE 10—Continued.

(North and east outlines.)—The country along these lines is rolling prairie with a clay loam soil which is very stony in the northeast towards the Souris river.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with a good soil. The northeast quarter is stony but would furnish good pasturage.—Sinclair and Francis, D.L.S., 1881.

(North and east outlines.)—The soil is all clay loam along these boundaries and very few marshes were crossed. The Souris river runs diagonally from the northwest to the southeast of the township and the land for a mile or two on either side of the river is very stony. The stream is about two chains wide and three to four feet deep with a sluggish current and a muddy bed. In the spring the whole valley bears indications of flooding.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is composed of rolling prairie and is traversed diagonally from the northwest to the southeast by the Souris river. There is some fairly good land in the northern portion but the remainder is unfit for settlement, being much broken by ravines. There are numerous wet marshes and ponds, but no timber whatever. The soil is generally a gravelly loam but is often sandy and stony and may be rated as second-class, third-class and fourth-class.—J. A. Carbert, D.L.S., 1881.

(North outline.)—The country along this outline is undulating and rolling **4.** prairie. In sections 36, 35 and 31 stony ridges were encountered and several ponds and marshes were crossed. The soil is a brownish clay loam with a clay subsoil and ranks as first-class and second-class. Generally this locality should make good farming country.—J. McLatchie, D.L.S., 1881.

(East outline.)—This outline traverses an undulating prairie with a clay loam soil. Very few ponds or marshes were seen in this township.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, broken by gravelly knolls.—
P. Burnett, D.L.S., 1881.

(North and east outlines.)—These lines run through rolling and undulating prairie which is rated as second-class land throughout and has some fine meadows.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is all prairie. The east and northwestern portions are rolling, while the southwestern portion is rough and broken by gravelly and stony knolls and large sloughs. The soil is a clay loam from eight to ten inches deep, with a clay and gravelly clay subsoil. It is uniformly second-class.—P. Burnett, D.L.S., 1881.

(North and east outlines.)—The land along these lines is of second-class quality and contains many small marshes and beaver meadows scattered throughout. In the east there are some scattered boulders.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township consists of prairie, part of which is level and part undulating, containing a considerable area of good meadow land. The soil is a clay

Range 10—Continued.

loam mixed with limestone gravel, overlying a subsoil of clay and rates as first-class and second-class. There is an abundance of good water.—D. C. O'Keeffe, D.L.S., 1881.

(North and east outlines.)—The north outline traverses rolling prairie inter7. spersed with numerous ponds and marshes. Some boulders were found in the central portion of section 32. A cart trail crosses the southern part of section 36. On the east outline the land is of second-class quality and contains a number of scattered ponds.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie containing a few scattered marshes. The soil consists of a black, sandy loam.—S. Brodie, D.L.S., 1881.

(North outline.)—The country along this line is undulating prairie which has a good soil and is suitable for settlement. There are numerous small, scattered and shallow marshes, but no streams.—O. J. Klotz, D.T.S., 1881.

(East outline.)—This outline traverses a rolling prairie with many ponds. The soil is fair, being rated as second-class.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is level prairie covered with spear grass. There are some ponds scattered throughout. The soil is a sandy loam with a white clay subsoil.—J. Stewart, D.L.S., 1881.

(North outline.)—The land along this outline is rolling prairie with a clay loam soil rating as second-class. The east half is very swampy, having several large sloughs.—J. A. Maddock, D.L.S., 1882.

(East outline.)—The land along this line is rolling with numerous wet marshes, and may be rated as second-class. The alluvial soil is about twelve inches deep and overlies a clay subsoil. There is no wood.—F. W. Armstrong, D.L.S., 1882.

(Subdivision.)—This township is open prairie with no wood of any description. In the northwestern part there is a large pond covering an area of 1,252 acres, and in the centre another pond with an area of 2,793 acres, which, as they dry up during the season, furnish a large quantity of hay. As there are no streams, these and other smaller ponds furnish the only water supply. The soil is very hard and dry, from four to six inches deep, with a clay subsoil, and rates as second-class.—J. Warren, D.L.S., 1882.

(North and east outlines.)—The land along the north outline is principally undulating with some surface stone, and may be rated as second-class. There is a layer of from ten to twelve inches of alluvial soil overlying a clay subsoil. A few small marshes were seen. The land along the east outline is open, rolling prairie. The depth of alluvial soil varies from twelve to sixteen inches. A number of ponds and marshes occur along the northern half, but throughout the southern part of the line the surface is dry. The land in sections 12, 13 and 24 rates as first-class, and the rest as second-class.—F. W. Armstrong, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie but in some places the surface is lumpy. There are many small marshes which afford an abundant supply of hay. There is also one very large, deep marsh, which at some seasons of the year must be a lake. Along the margin of this lake the grass is very luxuriant.—S. L. Brabazon, D.L.S., 1882.

Range 10—Continued.

(North outline.)—The land along this line is rolling prairie with a few sloughs. The soil is alluvial to an average depth of eight inches, over a clay subsoil. It rates as first-class and second-class.—J. A. Maddock, D.L.S., 1882.

(East outline.)—This line crosses rolling prairie. The alluvial soil is eighteen inches deep, and the land rates as second-class, except in section 1 where it is first-class. Several ponds occur along the central portion of the line. There is no wood.—F. W. Armstrong, D.L.S., 1882.

(Subdivision.)—This township is generally high, rolling prairie. Towards the northern boundary it becomes a little rough and somewhat hilly. At the time of survey (July) there was sufficient water in the marshes to supply the wants of settlers. Very fine pasturage was noticed in many places. There is no wood. The soil is a rich, dark loam from five to eleven inches deep overlying a clay subsoil, and rating as first-class.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—This line traverses rolling prairie and occasional swamps.

12. The soil is a sandy loam rating as second-class. In section 35 there is a small creek flowing southwest. The central part of section 34 is occupied by a marshy lake, from four to six feet deep, with good fresh water. The land is fair for both farming and grazing.—A. C. Webb, D.L.S., 1881.

(East outline.)—This line crosses rolling, broken and hilly prairie Sections 1 and 36 rate as second-class, and the remainder as third-class. The alluvial soil is eighteen inches deep, but it is generally gravelly or stony. One or more ponds or marshes occur in every section except sections 1 and 24. On the south half of section 12 there is a small creek flowing eastward through a marsh.—F. W. Armstrong, D.L.S., 1882.

(Subdivision.)—The land in this township is rolling prairie very much broken by gullies and hay swamps. Good water can be obtained almost anywhere a few feet below the surface. There is no wood in the township. The soil is a dark, sandy loam from four to eighteen inches deep, and may be rated chiefly as second-class, with some first-class and third-class.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—The land along these lines is open, rolling prairie with a good soil and may be rated as first-class.—F. W. Armstrong, D.L.S., 1881.

(Subdivision.)—The land in this township is undulating prairie, much broken by swamps and marshes. The lake in sections 2, 3, 10 and 11 contains good, clear water. The nearest wood is about twenty miles to the north. Although there are no streams in the township except that from the lake, good water can be obtained by digging from eight to twelve feet. The soil is a good, sandy loam and clay loam averaging from ten to twelve inches in depth overlying a clay or clay loam subsoil, and may be rated as first-class and second-class.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—These lines traverse high, rolling, open prairie, 14. with occasional marshes. The rating is first-class. Section 1 is greatly broken by precipitous ravines, and in the central portion there is a large marsh about ten chains wide. Moose Mountain creek flows through the centre of this marsh. Another creek flowing in a southwesterly direction crosses section 24. There is no wood.—F. W. Armstrong, D.L.S., 1881.

Range 10—Concluded.

(Subdivision.)—This township consists of good, rolling prairie, though stony and very much broken by creeks, small ponds and several hay marshes. Moose Mountain creek traverses the township in a southeasterly direction. The water, like that in the numerous ponds and swamps, though whitish in appearance, is very good for drinking purposes. The only wood is in a small bluff of poplar and willow in sections 31 and 32, together with a few small shrubs along Moose Mountain creek. The soil is a good clay loam from eight to fifteen inches deep, though stony and gravelly in the hilly places and along the margins of the creeks and marshes; it rates as second-class and third-class.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—The north outline crosses level prairie, with 15. bluffs of poplar and willow, and numerous ponds and marshes. The soil is a good clay loam, rating as first-class. There is a large, deep pond containing good water in section 36. The east outline traverses rolling prairie with bluffs of poplar and willow, the poplar being from two to six inches in diameter. The soil is a clay loam, rating as first-class. A creek with high steep banks runs through section 36. Section 1 is greatly cut up by ponds and hills, some of the ponds being quite large.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township is well suited to agricultural purposes. The soil is excellent, and there is plenty of timber for the requirements of settlers.—Burchill and Davies, D.L.S., 1882.

(North outline.)—This line crosses rolling and undulating land with an ascent to the west. The soil is generally fair throughout the east half, although somewhat gravelly on the ridges and strongly alkaline in a few places.—W. Pearce, D.L.S., 1881.

(East outline.)—This line crosses rolling prairie. The soil is a clay loam rating as first-class throughout. There are several marshes, and a large pond is found in section 36. There is no wood of any kind.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—The surface of this township is cut up by numerous precipitous gullies. There is a good deal of bush, but at present it is suitable only for fuel and fencing.—S. L. Brabazon, D.L.S., 1882.

Range 11.

(North outline.)—This boundary traverses a rolling prairie which has a hard, lumpy, clay soil of third-class quality. Water is scarce and there is no wood.—T. S. Gore, D.L.S., 1881.

(South outline.)—The country along this line is undulating and rolling prairie, with a sandy and clay loam soil of first-class quality overlying a clay subsoil. Part of section 1 is stony and gravelly and of second-class quality. Λ branch of the Souris river crosses section 1, flowing in a southeasterly direction; it is about eight inches deep and seventy-four links wide, and contains good water. Section 3 is greatly cut up by a small creek and a large coulée. Generally speaking, this country is good for farming.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, utterly devoid of timber. It is traversed by Long creek, which is the south branch of the Souris river, and is from fifty to one hundred feet wide and from two to six feet deep. The land north of this stream is undulating. The soil is a hard clay or sandy loam with a clay or sand subsoil and is of first-class quality.—L. P. Gauvreau, D.L.S., 1882.

Range 11—Continued.

(North and east outlines.)—These lines traverse a rolling prairie which has a hard loamy clay soil of third-class quality. Water is scarce and there is no wood.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with a number of ponds and marshes in which the water is good. The surface is hard and caked in many places, being composed of clay or loam from four to six inches in depth overlying a clay subsoil. The land is of first-class quality.—L. P. Gauvreau, D.L.S., 1882.

(North, east and south outlines.)—The country along these lines is rolling **3.** prairie which is stony in the northeast corner with a clay loam soil and occasional ponds. On the south the soil is hard, lumpy clay and rates as third-class. Water is scarce. There is no wood in the township.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie which has a very hard surface and is stony in places. The Souris river passes through sections 35 and 36 flowing southeasterly. The remainder of the township is very well watered. The soil is of first-class quality, being a hard clay or loam from four to six inches deep with a clay or sand subsoil.—L. P. Gauvreau, D.L.S., 1882.

(North outline.)—The country along this line is good farming land, it being **4.** principally rolling prairie with numerous marshes and hay meadows, and a few stony ridges. The soil is a brownish clay loam of first-class and second-class quality overlying a clay subsoil.—J. McLatchie, D.L.S., 1881.

(East outline.)—This line runs through rolling prairie which is composed of fair, clay loam land. The Souris river runs diagonally across the township and for a mile or two on either side the land is very stony. The river, which is about one hundred feet wide and three feet deep, has a sluggish current and a muddy bed.—
T. S. Gore, D.L.S., 1881.

(Subdivision.)—The Souris river traverses this township, flowing southwesterly through a valley which is about eighty to one hundred feet below the level of the surrounding country and about one-half mile wide. In the vicinity of the river, the surface is covered with boulders but these gradually disappear as you leave the river. None of the land in this township seems adapted to agricultural purposes.—C. P. Aylen, D.L.S., 1883.

(North and east outlines.)—The country along these lines is rolling and undulating prairie land of second-class quality. In the north there are numerous marshes and meadows, most of which contain water. Some surface boulders were seen in section 32. In the east a few beaver meadows were noticed.—C. E. Wolff, D.L.S., 1881.

(Subdivision).—This township is rolling prairie, broken by stony and gravelly ridges. The soil is a clay loam about ten inches deep with a clay subsoil and is chiefly of second-class quality with a little third-class.—P. Burnett, D.L.S., 1882.

(North and east outlines.)—These lines run through undulating and rolling **6.** prairie of second-class quality. Meadows, some of which were very large, were crossed in every section on the north outline, and numerous ponds were also seen. Some beaver meadows and marshes were noticed along the east outline.—C. E. Wolff, D.L.S., 1881.

Range 11—Continued.

(Subdivision.)—The surface of this township is generally undulating prairie except in the southwest corner where it is hilly and somewhat stony. There is no timber. The ponds, which generally contain good water, are smaller and less numerous than those in the adjacent townships. The soil is from six to fifteen inches deep, with a clay or sandy loam subsoil, and is of second-class quality.—E. D. Henderson, D.L.S., 1882.

(North and east outlines.)—The country along these lines is rolling prairie with numerous ponds and marshes, and may be rated as second-class land. Sections 32, part of 31, 25, 13 and 1 are thickly strewn with surface boulders. A cart trail crosses the east outline in section 25.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with numerous ponds, around which a considerable quantity of hay may be obtained in the fall. The water in some of the ponds is good, while in others it is bad, but these ponds are the only available supply of water which can be had without digging. The soil has an average depth of nine inches, with a clay or sandy loam subsoil, and may be rated second-class. A few surface stones were seen.—E. D. Henderson, D.L.S., 1882.

(North outline.)—This line traverses level country which has a fair but rather dry soil. There are some small marshes but no timber.—O. J. Klotz, D.T.S., 1881.

(East outline.)—In sections 1⁻ and 13 some surface boulders were found. The land is rolling and has a few meadows and a fair soil of second-class quality.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie with numerous ponds and marshes scattered over the surface. Some of the ponds are quite large. They vary in depth from two to six feet, and generally contain good water. The soil is of second-class quality. There is no timber whatever in the township.—E. D. Henderson, D.L.S., 1882.

(North outline.)—The land along this line is gently rolling, with a good clay loam soil rating as first-class, except in sections 35 and 36 which are rather wet and rate as second-class.—F. W. Armstrong, D.L.S., 1883.

(East outline.)—This line crosses gently undulating prairie, rising towards the north. There is excellent farming land in the south half, but many sloughs and swamps occur in the north half.—J. A. Maddock, D.L.S., 1882.

(Subdivision.)—This township is all level, open prairie, unbroken by hills. There are some ponds, part of a large one occupying a portion of section 36. There are also some hay meadows. The surface soil is hard and about three inches deep, with a clay subsoil, and rates as second-class.—J. Warren, D.L.S., 1882.

(North and east outlines.)—These lines cross rolling prairie with numerous 10. sloughs. The alluvial soil is of an average depth of eight inches over a clay subsoil and may be rated as first-class in the north and second-class in the east.—J. A. Maddock, D.L.S., 1882.

(Subdivision.)—The only drawback to this township as far as the settler is concerned is the lack of wood for fuel. The land is level and undulating prairie and the soil is a brown, loamy clay of first-class quality. Numerous small marshes afford a

RANGE 11—Continued.

good supply of hay. Water can be obtained throughout the township and it is all fresh and of good quality. A strip of lands extends from township 10, range 10, through the large marsh in the eastern part of the township as far as section 2. The soil of this strip is of the very richest quality. There is no timber of any kind.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—These lines cross rolling prairie with a few sloughs. The soil consists of about ten inches of clay loam overlying a clay subsoil, and may be rated at first-class and second-class.—J. A. Maddock, D.L.S., 1882.

(Subdivision.)—This township is level or undulating prairie. The soil varies from first-class to second-class. Some swamps were found in which the water was clear and of good quality, but the creeks were all dry at the time of survey. There is no wood of any kind in the township.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—This line traverses rolling prairie with occasional swamps.

12. The soil is sandy loam and clay loam, rating as first-class and second-class.

Much of section 36 is covered by a large swamp. Section 31 is well suited to farming purposes.—A. C. Webb, D.L.S., 1881.

(East outline.)—This line crosses prairie with occasional ridges from thirty to seventy feet high and frequent swamps. The soil is sandy loam and clay loam over a clay or sandy clay subsoil and may be rated as second-class and third-class.—J. A. Maddock, D.L.S., 1882.

(Subdivision.)—This township, as a whole, is well adapted to farming purposes. Good water can be had throughout the township at a depth of a few feet. The soil is a dark, sandy loam over a clay subsoil. There is no wood. The surface is somewhat broken by hay marshes and gullies:—Dumais and Michaud, D.L.S., 1882.

(North outline.)—This line crosses rolling prairie, with a clay loam soil rating as first-class. There are many small ponds and marshes, and a large marsh in section 36.—A. C. Thompson, D.L.S., 1881.

(East outline.)—The land along this line is high, rolling prairie, with many small marshes. The soil is very fair and rates as second-class in the south and first-class in the north.—F. W. Armstrong, D.L.S., 1881.

(Subdivision.)—The township is much broken by small swamps and hills varying from twenty-five to thirty feet in height. The tops of these hills are stony and sandy. Water can be obtained almost anywhere at from eight to twelve feet below the surface. The soil generally is well adapted to agricultural purposes. There is no timber of any kind.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—This line crosses rolling prairie with a clay loam soil 14. rating as first-class. The west half of section 31 is greatly cut up by ravines and a large marsh. In section 34 there is another large marsh with a creek running through the centre of it—and hills on the west side. The land around this marsh is excellent for farming.—A. C. Thompson, D.L.S., 1881.

(East outline.)—This line traverses high, rolling, open prairie, with occasional marshes. The soil is a clay loam, with some surface stones and may be rated as first-class in the four southern sections and second-class along the remainder of the line. A lake occurs in section 13, and in section 24 Chapleau lake is crossed.—F. W. Armstrong, D.L.S., 1881.

RANGE 11—Concluded.

(Subdivision.)—The land in this township is rolling prairie with many grassy swamps which are useful for grazing purposes. There is no wood whatever. Chapleau lake which is from two to nineteen chains wide extends across the northern part of the township. On either side of this lake there are gravelly banks from fifty to one hundred feet high. The water is clear and fresh, and the bottom is sandy. The soil throughout the township is generally a black loam seven or eight inches deep overlying a clay subsoil and rates as first-class.—F. Vincent, D.L.S., 1882.

This is a fractional township lying south of Assiniboine I.R. No. 76. It is divided into two nearly equal parts by an escarpment about fifty feet high which extends across it from the northwest to the southeast. The tract of country lying to the southwest is gently undulating and rolling prairie with a soil which ranks as first-class and second-class and is well adapted to agricultural purposes. The portion lying to the northeast is rolling and hilly prairie with some scattered scrub. The soil ranks as second-class and third-class and is well adapted for mixed farming. There are many fine hay meadows and some ponds of good water. A trail from Moose Mountain creek to Wolseley in township 17-10-2 crosses the township and affords easy access to these lands.—W. T. Thompson, D.T.S., 1892.

RANGE 12.

(North and east outlines.)—The soil throughout the eastern part of the north outline is a hard lumpy clay, while to the west there is a sandy loam. Sections 31 and 32 have second-class land and the rest third-class. There is no wood along the line. Along the east outline the soil is light and gravelly in the four southern sections and hard, lumpy clay in the two northern ones. The line is crossed by two creeks flowing easterly, one, Long creek, in the south of section 24 and the other in section 12. South of Long creek the soil is rather light while in the north it is a hard clay which is often found in circular, hard, cracked knolls, five or six feet in diameter and one foot high, and impossible to penetrate with a spade.—T. S. Gore, D.L.S., 1881.

(South outline.)—Along this line the country is rolling and undulating prairie with some marshes scattered about. The soil is a clay loam of second-class quality overlying a clay subsoil. It is good for agricultural purposes, although some of the sections are rather stony. There is a creek in section 2, a large pond in section 3, and a creek-bed running along the line in sections 4 and 5. Section 3 is rather hilly and is crossed by an old cart trail.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, having a soil of hard clay about five inches deep, overlying a sandy subsoil, and is of first-class quality throughout. Long creek, which is about fifty to one hundred feet wide, two to six feet deep, and containing muddy water, flows diagonally across the township from northwest to southeast. The township generally is well watered.—L. P. Gauvreau, D.L.S., 1883.

(North and east outlines.)—The country along these lines is rolling prairie having a clay soil which is hard and lumpy in many places and of third-class quality. Section 1 is low and swampy in the southern portion. Water is scarce and no wood was seen along either line.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie. The soil is very hard, but it is well watered and ranks as first-class. Long creek, a stream of muddy water from 50 to 120 feet wide and from two to six feet deep, crosses sections 4, 5, 6 and 7 in a southeasterly direction.—L. P. Gauvreau, D.L.S., 1882.

Range 12—Continued.

(North and east outlines.)—Along these lines the soil is a sandy loam of second-class quality everywhere except in section 35 where it is first-class. On the central portion of the east outline there are several large marshes.—
T. S. Gore, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with a hard, sand and clay soil which is stony in places and is of first-class and second-class quality.—L. P. Gauvreau, D.L.S., 1882.

(North outline.)—This outline traverses a rolling stony prairie with many **4.** marshes and sloughs. The soil is a sandy loam of second-class and third-class quality, overlying a clay subsoil. In section 34 there is a large lake the banks of which, on either side are 100 feet high. Section 33 is very hilly with some good soil in the valleys; some of the hills are 150 feet in height. The Souris river flows through this section, its average width being about thirty feet and its depth about three feet.—J. McLatchie, D.L.S., 1881.

(East outline.)—This locality is rolling prairie consisting of fair land. The Souris river, which is about one hundred feet wide and three feet deep and has a sluggish current and a muddy bed, flows diagonally across the township. The land for a mile or two on either side of the river is very stony.—T. S. Gore, D.L.S., 1881.

(Subdivision.)—The Souris river, which is about two chains wide and two to four feet deep, flows with a very slow current through the northeast part of this township. In the valley of the river, which is about half a mile in width, and bounded on either side by a range of hills varying from eighty to one hundred feet in height, there are some ash and maple trees averaging from six to eight inches in diameter. The land is generally of second-class quality, although there are some small tracts of first-class land scattered throughout.—C. P. Aylen, D.L.S., 1881.

(North and east outlines.)—The country along the north is undulating, with some surface boulders and a number of meadows, and is generally second-class land. Sections 32 and 33 are thickly strewn with boulders, which make the land third-class in quality. Along the east the land is of second-class quality, being rolling and undulating in the four southern sections, and rough and hilly in the two northern ones. Some small meadows were crossed.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie, traversed by the Souris river from north to south. On both sides of the river there are a number of deep ravines, the slopes and bottoms of which are very stony. Along the margin of the river, and also along a tributary entering it from the northwest, there are belts of thick underbrush, some ash, elm, and cherry timber, not exceeding seven inches in diameter, and one or two small groves of poplar. Distinct traces of lignite were found along the banks of the river. The soil is clay, but much broken by stony and gravelly ridges, and is chiefly of third-class quality.—P. Burnett, D.L.S., 1882.

(North and east outlines.)—The country along the north outline is rolling and level prairie of second-class quality, while that along the east is undulating except sections 25 and 36, which are rolling. Numerous meadows and marshes were crossed on both lines, and many surface boulders were found in section 32.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, with a soil from six to twenty inches deep over a light sandy loam, or gravelly subsoil. It is chiefly of second-class quality, although there is some land which is rated third-class. The Souris river

Range 12—Continued.

passes through the southwest portion of the township traversing sections 5, 8, 7, and 18. On the northeast side of the river there are several large ravines, which have an average depth of fifty feet, and run north and east, in some cases to a distance of a mile. The land along these ravines is very stony, and in some places large boulders were seen. The land towards the north and east is somewhat better than that in the southwest, as it has some scattered ponds, most of which were dry in August. Water is scarce throughout, but could probably be obtained by digging wells. There is practically no timber in the township except two or three small clumps of poplar, on the southwest bank of the river; none of these clumps contain more than forty or fifty trees, and the greatest diameter is about six inches. Some clumps of underbrush also occur along the banks.—E. D. Henderson, D.L.S., 1882.

(North and east outlines.)—These lines traverse a rolling prairie with numerous swamps, marshes and beaver meadows. The centre of section 35 is very stony and surface boulders were seen in the north half of section 36. A cart trail crosses the north half of section 13. The land generally is of first-class and second-class quality.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, having a soil from six to twelve inches deep over a sandy loam subsoil and is of second-class quality throughout. The land is quite stony, but as most of the stones are on the surface they would not greatly interfere with the working of the land. In sections 21, 22, 27, 28, 29, 30 and 31 there are numerous small gullies all of which are very stony. There is no timber of any description. Water is easily obtainable all through the township.— E. D. Henderson, D.L.S., 1882.

(North outline.)—Along the north boundary the country is level with a fair but dry soil with the result that the vegetation is rather stunted. One or two large hay meadows were crossed.—O. J. Klotz, D.T.S., 1881.

(East outline.)—This outline traverses a rolling prairie with numerous ponds and beaver meadows and is rated as first-class and second-class land. A cart trail crosses section 24.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie having a very good soil from twelve to eighteen inches in depth with a clay and sandy loam subsoil, but it is so broken by numerous ponds that the land is only rated as second-class. The two western tiers of sections are fairly dry but the remainder of the township is very wet, although in the course of time it might be drained by utilizing the dry watercourse between sections 5 and 6 which runs to the Souris river. The surface is rather stony towards the southwest but not to a degree that would prove a hindrance to the working of the land. There is no timber of any description.—E. D. Henderson, D.L.S., 1882.

(North and east outlines.)—These lines traverse rolling prairie with a grey **9.** clay soil overlying a bluish white clay subsoil. The grass is very short. The surface water, with a few exceptions, is good. There is no wood.—

F. W. Armstrong, D.L.S., 1883.

(Subdivision.)—The land is gently undulating prairie with no timber. There are a few ponds, and in the western portion a large hay marsh is found. There are no streams, the only water supply being the ponds. The surface soil is very hard and dry, from three to six inches deep, with a clay subsoil, and rates as second-class.—J. Warren, D.L.S., 1882.

RANGE 12—Continued.

(North and east outlines.)—These lines cross rolling prairie, with a very friable, grey clay soil. The growth of grass, however, is very good, and the surface water is fresh. There is no wood.—F. W. Armstrong, D.L.S., 1883.

(Subdivision.)—The surface of this township though generally level is much broken by marshes, some of which are large and very deep. The soil is excellent, being a heavy loamy clay. Near the marshes there is excellent pasturage and a large quantity of hay is obtainable from these marshes. The water is good. There is no wood.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—This line crosses rolling prairie the soil of which is a hard, black loam overlying a blue clay subsoil. There is not much water, but what water exists is fresh.—F. W. Armstrong, D.L.S., 1883.

(East outline.)—The land along the east outline is rolling prairie with a few sloughs. The soil is good and nearly all first-class, it being a dark loam overlying a clay subsoil.—J. A. Maddock, D.L.S., 1882.

(Subdivision.)—The surface of this township is rolling and broken by numerous hay marshes. There is no wood. The soil is generally a dark, sandy loam, averaging from four to eight inches in depth and overlying a clay subsoil. Good water may be obtained in any part by digging a few feet. The whole township is suitable for farming.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—Sections 35 and 36 are rolling prairie broken by occasional **12.** swamps. The soil is sandy loam. Sections 31, 32, 33 and 34 are rolling or undulating, with a clay loam soil rating as first-class and second-class throughout. In section 31 a range of ridges is found.—A. C. Webb, D.L.S., 1881.

(East outline.)—The land along this line is rolling with a dark loam soil overlying a clay subsoil, except in the northwest corner which is sandy. The water in the township is fresh. There is no wood.—F. W. Armstrong, D.L.S., 1883.

(Subdivision.)—This township is all bare rolling prairie much broken by hay marshes and gullies. At the time of survey the marshes were all dry. The soil is generally sandy loam varying from three to fifteen inches in depth, overlying a clay subsoil, and is well adapted to farming.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—These lines traverse rolling prairie with a clay loam soil, rating as first-class. There are small marshes scattered along the lines. The land is well adapted to wheat growing.—A. C. Thompson, D.L.S., 1881.

(Subdivision.)—This township consists of rolling prairie with a number of grass swamps. There is no wood. The land is better adapted to grazing than to agriculture. The soil consists of good clay loam seven or eight inches deep overlying a sandy clay subsoil, and may be rated as second-class.—F. Vincent, D.L.S., 1882.

(North and east outlines.)—The land along these lines is rolling, with a clay 14. loam soil, generally rating as first-class. Chapleau lake extends across sections 25, 36 and 35. On the whole, the land along this line is excellent for farming. Along the east outline there are a few marshes and in section 25 there are many stony ridges. The banks of Chapleau lake are marshy; the water is of good quality.—A. C. Thompson, D.L.S., 1881.

Range 12—Concluded.

(Subdivision.)—This land is rolling prairie with a great number of grassy swamps, and is very good for grazing. There is no wood. Chapleau lake which is from two to eight chains wide and from two to six feet deep extends across the northeast corner of the township. The soil is a very good clay loam, seven or eight inches deep, and rates as second-class.—F. Vincent, D.L.S., 1882.

- 15. comprising about two-thirds of the township is mostly occupied by the Hurricane hills and is very much broken. The soil is very inferior, being sandy and gravelly with numerous stones and boulders on the hills. There is one very large granitic boulder in section 15, the portion above ground being twenty feet, by six feet, by eight feet. There is a ring or track around it about three feet deep, and its surface is in many places well polished, indicating the presence of buffalo here in former years. There are numerous fine hay meadows and some ponds of good water. The remaining portion comprising about one-third of this township lying east of the valley of Chapleau lake is open, undulating prairie with a soil which ranks generally as second-class and is well adapted for agricultural purposes. There is an abundant supply of water in the marshes and ponds lying in the valleys of Redfox and Moose Mountain creeks, the sources of which lie in this township, and there are also several good springs. With the exception of a little scattered scrub there is no timber whatever.—W. T. Thompson, D.T.S., 1892.
- The surface of this township is much broken by ridges and ravines, the 16. latter containing a fair supply of timber such as poplar and balm of Gilead, from three to twelve inches in diameter, but suitable only for fuel. The soil ranks generally as third-class and fourth-class. The hills and ridges are in many places covered with stones, but there is good pasturage in the flats and valleys. This township is considered excellent for stock-raising, being well watered by Redfox creek which runs through the tier of sections adjoining Assiniboine I.R. No. 76. There are also several ponds and springs.—W. T. Thompson, D.T.S., 1892.

Range 13.

(East and south outlines.)—Along these lines the country is rolling and hilly prairie with a few large marshes and ponds. The soil is a clay loam, stony in places, overlying a clay subsoil, and may be rated as second-class throughout. The cactus plant is very abundant in this district.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The land in this township is of fair quality and all the water is fresh except in a small belt along the south boundary, where the ponds are strongly alkaline. The soil is of first-class quality but there is no wood.—C. P. Aylen, D.L.S., 1883.

(East outline.)—This line traverses a rolling and undulating prairie with several marshes and has a clay loam soil of second-class quality, overlying a clay subsoil. The cactus plant is quite plentiful all along the line. Section 13 is rated first-class and second-class. Surface stones are met with in section 36. Long creek crosses the line three times in section 12 and a cart trail runs along parallel to the creek. Generally this country is fair farming land.—J. McLatchie, D.L.S., 1881.

RANGE 13—Continued.

(Subdivision.)—This township consists of undulating prairie, having an alluvial soil of sandy loam and a subsoil of stiff clay and gravel in nearly equal proportions. Long creek traverses the township in a southeasterly direction; it has an average width of one chain, a depth of from two to four feet and a current which does not exceed one mile per hour. Traces of coal were found in sections 22 and 23. The only wood found in the township consists of some small willows along the banks of the creek. Generally speaking the land is all of first-class quality.—C. P. Aylen, D.L.S., 1883.

3. many sloughs and marshes. The soil of this locality is a clay loam of first-class and second-class quality, overlying a clay subsoil. The southeast quarter of section 24 is low land, being of second-class and third-class quality and containing patches of cactus. A creek crosses the southern part of section 1. —J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, having an alluvial soil of four to six inches of sandy loam overlying a subsoil of clay and gravel which is extremely hard. The alluvial soil has disappeared in places, leaving exposed the subsoil of extremely tenacious clay mixed with gravel and boulders. There is a lake in the southeast which merges into a large swamp or marshy lake. There is no wood of any description in the township but the land is very fair for farming purposes, about fifty per cent being of first-class quality and the remainder second-class. Long creek. which is about forty-five links wide, crosses the south boundary in section 6.—C. P. Aylen, D.L.S., 1883.

(North and east outlines.)—The country along these outlines is undulating **4.** and rolling prairie, having a soil of clay and sandy loam of first-class and second-class quality, overlying a clay subsoil. A number of the sections along the north are stony and several stony ridges were crossed by the east outline. Coulées were met with in sections 36, 31 and 24 and a creek was crossed in section 13. There are some good hay lands in section 12.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The land in this township is poor for agricultural purposes as the alluvial soil is not of sufficient depth and the subsoil is too hard to admit of being ploughed. There is a fair growth of grass, and water may be found in several places during the greater part of the season. There is no wood whatever in the township and the land generally is of second-class quality.—C. P. Aylen, D.L.S., 1883.

(North outline.)—The country along this line is traversed by several deep ravines which run in a southeasterly direction, each usually containing a small creek. The slopes to these ravines are mostly covered with boulders of all sizes. About fifty per cent of the land is suitable only for pasturage. There is some wood in the ravines.—T. Fawcett, D.T.S., 1881.

(East outline.)—This outline traverses a rolling stony prairie, having a soil of second-class and third-class quality, being sandy loam overlying clay. A large coulée is crossed in sections 1 and 12. Two creeks, one in section 12 and the other in section 24, were met with. Each has very high banks and cuts up the above sections to a considerable degree.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is generally undulating, high, dry, open prairie, well covered with a thick growth of grass. A few conical knolls occur, the summits of which are strewn with boulders. A deep creek crosses the northeast corner of the

Range 13—Continued.

township and two shallow coulées which run easterly were encountered. The southerly one of these coulées was dry in August. The soil is chiefly second-class with some, in scattered patches, which is first-class and third-class. It consists of a light sandy loam from three to six inches with surface stones in places, and overlies a sandy and stony subsoil.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—This line crosses several deep ravines which extend in a southeasterly direction. At the bottom of each there is a small stream. The land sloping to these ravines is mostly covered with erratic blocks and boulders in sizes from a pebble to masses weighing several tons. Probably about half the land might do for grazing. There is some wood in the ravines.—T. Fawcett, D.T.S., 1881.

(East outline.)—The country along this line is undulating and stony prairie with a sandy loam soil of second-class and third-class quality, overlying a clay subsoil. The Souris river, crossing the line in section 13, has banks which reach a height of 200 feet. Creeks of good water cross the line in sections 25 and 36.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The southwest portion of this township is gently rolling prairie well suited for agricultural purposes, while the remainder is of inferior quality being very broken and stony. The northeast corner is traversed in a southeasterly direction by the Souris river, the banks of which are very steep and stony. Another stream, which apparently takes its rise in this township, has also very rough and stony banks and flows southeasterly; during August this stream became merely a succession of pools. Along the Souris river there is some small poplar and some willow underbrush but these are in such small quantities as to be hardly worth mentioning. The soil varies from first-class to fourth-class, being from two to six inches deep with a sandy loam, clay or gravelly subsoil.—C. G. Sheppard, D.L.S., 1882.

(East outline.)—The soil in the east is very dry and consequently the vegetation is poor. Some cactus was seen and this is a sign of bad land. The surface is undulating. A few marshes were crossed.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is all prairie. The northeast portion is gently rolling, having a soil of rich clay loam, and is traversed in a southeasterly direction by an old cart trail which is the one supposed to have been in use from Wood mountain to Fort Ellice. The southwest portion of the township is traversed by the Souris river, a stream of good water flowing in a southeasterly direction. This stream is about twenty feet wide and three to four feet deep; it has a sluggish current and a very soft, muddy bottom. The land on either side is very stony and broken by numerous deep ravines. Magnificent cacti flourish especially in the barren parts where no other vegetation was seen. The soil is generally from two to eighteen inches deep with a dry clay or sandy loam subsoil, and is rated as first-class, second-class and third-class.—C. G. Sheppard, D.L.S., 1882.

8. lating and level prairie with a few scattered small marshes, and some cactus showing that the land is of inferior quality. The country along the east is undulating having some scattered marshes. No wood was seen on either line.—
O. J. Klotz, D.L.S., 1881.

Range 13—Continued.

(Subdivision.)—This township is open, high, dry prairie with an undulating surface and interspersed with some grassy marshes of good fresh water. As the north-east half is rather high, the soil is generally dry and very hard, while in the southwest the surface is gently rolling and the soil is of much better quality. In some places a rich yellow loam was found at a depth of ten inches. Spear grass forms the principal herbage in this district. Four coulées were encountered but these were all dry in July. The soil is of first-class and second-class quality, being three to ten inches deep with a clay subsoil. A cart trail from Wood mountain to Fort Ellice crosses the township near the centre.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—The country along this line is fine prairie, very suitable for farming purposes. The soil in some places is sandy and in others clay loam and rates as first-class, except sections 31 and 32 which are low, wet and swampy with some large hay meadows.—J. G. Sing, D.L.S., 1882.

(East outline.)—Along the east outline the land is undulating and the soil is good. There are a number of small shallow marshes and some fine hay meadows.—O. J. Elotz, D.T.S., 1881.

(Subdivision.)—The land in this township is open, gently undulating prairie. There is no wood of any kind. The surface is generally dry as there are only a few ponds. There is part of a hay marsh in sections 24 and 25, the remainder lying in the adjacent township. The soil is very hard and dry, from three to four inches deep, with a clay subsoil, and would rate as second-class.—J. Warren, D.L.S., 1882.

(North outline.)—The land along this outline is low and wet, with numerous 10. marshes and ponds. The soil is generally a clay loam overlying a clay subsoil, and in some places it is wet clay, rating as third and fourth-class. In section 32 there is a sluggish creek with low banks. It is about three feet deep and contains good water. The land along this line is unfit for farming purposes, but as there is a fine growth of grass it is valuable for grazing.—J. G. Sing, D.L.S., 1882.

(East outline.)—Along the east outline the land is undulating and level with an excellent soil. There are scattered shallow marshes.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—The land in this township is undulating prairie somewhat broken by marshes. There is a great extent of excellent pasturage, and an abundance of hay could be obtained from the marshes. The water is fresh and of good quality. The soil is a brown clay, which, from drought, had become very hard at the time of survey (August); but the fresh condition of the herbage and other indications shows that the land is of excellent quality. It would rate as first-class.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—Along this line the surface is level with occasional ponds. The soil is a stiff clay, very hard to penetrate, and would rate as second-class. The land is hummocky in places.—J. G. Sing, D.L.S., 1881.

(East outline.)—The land along this line is rolling prairie with a soil of sandy loam or clay loam. It is good farming or grazing land. Occasional swamps and ponds occur.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This land is rolling prairie with a clay and gravelly loam soil varying from three to ten inches in depth. It is first-class wheat land and well suited for farming purposes. The only drawback is that it is considerably broken by a

Range 13—Continued.

number of hay marshes, most of which, however, were dry at the time of survey. Water is easily obtained by digging a few feet. There is no wood.—Dumais and Michaud, D.L.S., 1882.

(North and east outlines.)—Along these lines the country is rolling and undulating prairie with a sandy and clay soil rating as first-class and second-class. Occasional hay marshes occur along the north outline.—R. C. Webb, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie with many grassy swamps and is well suited to grazing. The soil is a good clay loam with a sandy subsoil, and rates as second-class.—F. Vincent, D.L.S., 1882.

(North outline.)—The land along this line is rolling prairie, with a first-13. class soil of sandy loam and some gravel. Manybone creek, a fine stream about fifteen inches deep (September) flows northward across section 34.— A. F. Uotton, D.L.S., 1881.

(East outline.)—This line is rolling and undulating prairie with occasional swamps. The soil is sandy loam and clay loam, rating as first-class and second-class. A creek bed with high, precipitous banks and having water in pools, crosses the southerly half of section 12. The land is fair for farming and grazing purposes.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie with many grassy swamps. It is well suited to grazing. The soil is a good clay loam with a sandy subsoil, and rates as second-class.—F. Vincent, D.L.S., 1882.

(North outline.)—The land along this line is gently rolling prairie, with a **14.** first-class soil of sandy loam, though somewhat gravelly in places. Surface water is scarce.—A. F. Cotton, D.L.S., 1881.

(East outline.)—Along this line the land is rolling or undulating prairie. The soil is sandy loam or clay loam. There are occasional swamps or ponds. The land is fair for farming or grazing.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie with many grassy swamps. It is well suited for grazing. The soil is a good clay loam overlying a sandy subsoil, and may be rated as second-class.—F. Vincent, D.L.S., 1882.

The surface of this township on the east is broken by the western slope of the Hurricane hills and the north is also somewhat broken by ridges. This broken portion comprises about one-third of the township and is best adapted for grazing purposes, the soil ranking as second-class and third-class. The remaining portion is well suited for farming purposes, the soil being generally clay loam ranking as second-class. In sections 34, 35 and 26 there is a lake (Redfox lake) with slightly alkaline water, and also a fine spring in section 36. In the southwestern portion there are several small ponds of good water and some fine hay meadows, some of which contain water. Except in the Hurricane hills, where there are scattered granite and limestone boulders, the land is comparatively free of stones.—W. T. Thompson, D.T.S., 1892.

Range 13—Concluded.

The land in this township to the north and east is open, rolling prairie, with scattered hay meadows, and is best adapted for grazing. The soil is light and sandy, and ranks as third-class. To the south and west the country is open, undulating prairie, with numerous hay meadows, and is suitable for mixed farming. The soil is generally a sandy loam, or clay loam, and ranks as second-class. The northwestern slope of the Hurricane hills lies in sections 1, 12 and 13. This township is well watered by the Strawberry lakes, three in number, lying partly in and between sections 31 and 14, and there are also several ponds and springs. The lakes are fringed with willow and poplar, and in section 14 there is a large bluff of poplar and balm of Gilead, varying from three to twelve inches in diameter, which will afford a good supply of fuel. There is also a fair amount of timber suitable for fuel in ravines in section 36.—W. T. Thompson, D.T.S., 1892.

RANGE 14.

(East outline.)—The country along this line is very hilly and stony prairie, with several small marshes. The soil is a light, sandy loam of third-class quality, overlying a light clay subsoil.—A. O. Wheeler, D.L.S., 1883.

(South outline.)—This line runs through rolling and hilly prairie, interspersed with numerous marshes and ponds. A creek takes its rise in a large marsh in section 1. The soil is a sandy loam, somewhat stony, and is of second-class quality, with a clay subsoil. The surface of section 3 is gravelly, and an old cart trail crosses the east half of section 4.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township, which is wholly in the Missouri coteau, is rolling prairie of good quality. The alluvial soil is a sandy loam of fair quality and depth, overlying a clay subsoil. There is an abundance of fresh water, except near the south outline, where the ponds are strongly alkaline. There is no wood of any description in the township, but the land is mostly of first-class quality, and should prove good for agricultural purposes. In the north the country is high and rolling, having a soil of first-class and second-class quality, which consists of clay and gravel overlying subsoils of blue clay, clay and gravel. There is a small marsh in section 32, and a pond in section 34.—C. P. Aylen, D.L.S., 1883.

(East outline.)—This outline traverses land which is rolling, hilly and very stony. The Dirt hills occupy the southwest half of the township. The soil is sandy and gravelly, with a light clay and gravelly subsoil, and is of third-class quality. Long creek runs through section 36, and a cart trail crosses the line in section 24. A few small marshes were met with.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—In this township, which is partially in the Missouri coteau, the land is of fair quality, but in many places it is not well adapted for agriculture on account of the large number of boulders. Tracts of good land, amounting to about forty per cent of the whole, are scattered throughout, and the remainder is of second-class quality. Long creek, which is about one chain wide and three feet deep with a very slow current, traverses several of the northern sections. There is an abundance of water in the numerous hay meadows, but no wood was seen. Along the north the soil is a sandy loam of second-class quality overlying a clay subsoil.—C. P. Aylen, D.L.S., 1883.

RANGE 14—Continued.

- 3. Under very favourable circumstances, but is fairly well adapted to grazing purposes. There are numerous fresh water ponds and hay marshes, but no wood was seen. Long creek, which is about one chain wide and three feet deep and has a very slow current, runs through the southwest part of the township. The surface is generally undulating, and the soil is a sandy loam with a gravel subsoil.—C. P. Aylen, D.L.S., 1883.
- (North outline.)—The country along this line is rolling and undulating, 4. having numerous ponds and marshes and some very good hay land. The soil is of first-class and second-class quality, consisting of clay and sandy loam, which is stony in places, overlying a clay subsoil. A creek bed crosses part of section 36.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This is a fair average township with a good supply of fresh water but absolutely no timber. The alluvial soil is sandy loam from four to eight inches in depth, with a subsoil of tenacious clay. About eighty per cent of the land is first-class, and the remainder second-class. It is all fairly well adapted to wheat-raising.—C. P. Aylen, D.L.S., 1883.

(North and east outlines.)—The surface along these boundaries is high and rolling, and is composed of fair arable land. There are some stony ravines with small brooks in them running across the township.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie supporting a good growth of grass and having a light and gravelly soil. It is better suited for grazing purposes than for cultivation. A creek of good fresh water traverses the township from west to east. The land is devoid of timber.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—The country along these outlines is high and rolling, having a fair surface soil and may be rated as good arable land. There are some ravines in the township which contain small streams and have numerous boulders in their vicinity.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is all rolling prairie and is only suitable for grazing purposes. The soil is light, sandy and gravelly, and there is absolutely no timber.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—On these boundaries the soil is of good quality, being a dark clay loam. On the west side of the township several grassy ponds and sloughs were met with.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is mostly gently rolling prairie covered with spear grass. The northeast corner is rather hilly and stony and is crossed by the Souris river. The soil is a dark sandy and clay loam, and the land is suitable either for agriculture or for pasturage. The west side, though drained by a running stream which flows into the Souris river, is low and wet, while the east is high, undulating land.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—Along this line the soil is only of medium quality and water is very scarce.—O. J. Klotz, D.T.S., 1881.

Range 14—Continued.

(East outline.)—This outline runs through land which is of good quality and is suitable for farming. Near the southeast corner a number of high hills were crossed. The Souris river traverses the township in a southeasterly direction.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is rolling prairie and is traversed by the Souris river, which is, in this locality, a sluggish stream running between low banks. In September there was no perceptible current, the water standing in pools only. Numerous shallow, dry water courses were observed extending towards the river and these should facilitate the drainage of the land. In sections 2, 3, 9 and 16 there are some elevations which rise from forty to seventy feet above the general surface. The soil is from eight to eighteen inches deep with a clay subsoil and is of first-class quality.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—Along this line the land is generally level, gravelly and gravelly with a clay soil rating as first-, second- and third-class. In section 35 there are some large boulders and a considerable quantity of gravel.—

J. G. Sing, D.L.S., 1882.

(East outline.)—The land along this line may be rated as second- and third-class, a considerable part of it being boggy and hummocky. In places the surface is covered with large boulders.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land in this township is level, open prairie, with no wood whatever. It contains no hay marshes and very few ponds. The soil, which is very hard and stony, is from two to four inches deep, with a clay subsoil, and rates as second-class and third-class.—J. Warren, D.L.S., 1882.

(North outline.)—The soil along this line is generally a rich, brown loam, 10. and may be rated as first-class and second-class. An exception to this is in section 33, which is marshy land, rating as fourth-class. A sluggish creek about twenty feet wide and three feet deep crosses section 31. Several large hay marshes were noted. The land at present is better adapted to grazing than to agriculture.—J. G. Sing, D.L.S., 1882.

(East outline.)—The country along the east outline is generally rolling prairie with a light clay or sandy loam soil overlying a stiff clay subsoil. In section 1 the land is low and very stony. Sections 25 and 36 are low and marshy, but the land along the remainder of the line is dry. A large hay meadow was noted in section 13.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—This township is level prairie with a few small marshes. The land in parts is inferior, being very stony and hard, and covered with a scant growth of grass. The soil rates_as first-class, second-class and third-class. A watercourse traverses the township, but it contained no water in August. The water found elsewhere is fairly good.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—The country is level, with occasional ponds.

11. The soil is second-class, being a stiff clay which is very hard to penetrate.

The surface is rough in places owing to small hummocks. There is no wood.

—J. G. Sing, D.L.S., 1881.

Range 14—Continued.

(Subdivision.)—The land in this township is rolling prairie. The soil is a clay loam overlying a clay subsoil and may be rated as second-class and third-class throughout. In the southwest part of the township there are a few swamps and small creeks which were dry at the time of survey. There is no wood.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this line is rolling prairie with a clay and sandy loam soil, rating as first- and second-class. A creek flowing through section 34 has a slow current, is about two feet deep and contains good, fresh water. Section 32 has gravelly ridges. The land is good for farming.—A. C. Webb, D.L.S., 1881.

(East outline.)—Along this line the surface is level. The soil is a stiff grey clay, hard to penetrate and is rated as second-class. In places there are small hummocks, and there are also a few ponds.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land is rolling prairie, with numerous grassy swamps, making the land better suited for grazing than for agriculture. The soil consists of a good clay loam overlying a sandy clay subsoil in the eastern part, and a black and blue clay subsoil in the west. It rates as second-class.—F. Vincent, D.L.S., 1882.

(North outline.)—Along the north outline the country is rolling and undu13. lating prairie, somewhat hummocky in places. The soil is clay loam overlying grey and blue clay subsoils, and rates as second-class. A great many
large marshes were crossed. There is a fine hay slough in section 32. A creek
crosses section 36, but it contains water only in pools. Immediately to the west of
this section there is low, wet alkali land.—J. G. Sing, D.L.S., 1882.

(East outline.)—This line crosses prairie land with a sandy loam and a gravelly soil. Section 36 is somewhat broken by gullies.—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling prairie. The soil consists of from three to eighteen inches of clay loam overlying a clay subsoil, and may be rated as first-class and second-class. The southwest corner is traversed by Waskana creek which flows in a northwesterly direction between banks about fifteen feet high. This stream was about ten inches deep and had a very slight current at the time of survey (September). The water in the marches is alkaline.—C. G. Sheppard, D.L.S., 1882.

(East outline.)—This line crosses rolling prairie. The soil is a sandy loam and gravel, rating as first-class. There are a few ravines and the dry bed of a creek (October).—A. F. Cotton, D.L.S., 1881.

(Subdivision.)—This land is rolling prairie, with a few marshes and ponds. The soil consists of about four inches of clay loam overlyng a hard clay subsoil, and may be rated as second-class. Except in a few of the marshes where a slightly alkaline taste was noticed, the water is good throughout the township. Manybone creek which flows in a northwesterly direction across the northeast corner of the township was almost dry at the end of July, water being found only in pools.—J. J. McKenna, D.L.S., 1882.

*(North outline.)—Along this line the soil is excellent, being a rich clay 15. loam. The surface is slightly rolling, and is broken in places by ravines, many of which are very deep. Manybone creek which flows across this township in a northwesterly direction is about fifteen feet wide and two feet deep, and contains good fresh water.—J. G. Sing, D.L.S., 1882.

Range 14—Concluded.

(Subdivision.)—This land is rolling prairie with numerous ponds and grassy marshes. Manybone creek runs in a northwesterly direction across the township. The water in this creek and also in the ponds and marshes was found to be fresh. The soil is generally a clay loam overlying a stiff clay subsoil, and may be rated as second-class. Along the banks of the creek the surface is rather stony.—J. J. McKenna, D.L.S., 1882.

(North outline.)—Along this line the land is rolling prairie. There are low ridges of gravel and many ponds with a narrow margin of willow and poplar. W. Pearce, D.L.S., 1881.

(East outline.)—The country along this line is cut by many ravines, some of which are very deep. The soil is excellent, being a rich sand and clay loam covered with about ten inches of alluvial soil. The water in the ponds is fresh and of good quality.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land is level prairie well suited to farming. The soil is a good sandy loam with a sandy subsoil. There are numerous ponds with fresh water, and also some hay marshes and meadows. There is no timber.—J. J. Francis, D.L.S., 1882.

RANGE 15.

(East outline.)—The country along the east outline is heavily rolling and very stony. The elevations range from sixty to seventy feet in height. The soil is a sandy loam of third-class quality with a light clay subsoil. There are numerous small ponds and marshes scattered along the line.—A. O. Wheeler, D.L.S., 1883.

(South outline.)—This outline runs through a rolling and hilly country with many marshes and ponds. The soil, which is stony and of second-class quality, is composed of a clay loam overlying a clay subsoil. There is a large pond in section 5 and a small lake in the southeast quarter of section 6; the water in these is of good quality.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township, although situated in the Missouri coteau, is gently rolling prairie, having a fair soil of sandy loam with a clay subsoil. There is a well-defined belt of land adjoining the international boundary in which the water is all strongly alkaline. This belt extends across the township in almost a straight line from the north of section 1 to the north of section 7. The water in the remainder of the township is fresh. There is no wood.—C. P. Aylen, D.L.S., 1883.

(East outline.)—The land along this line is heavily rolling, with ridges from thirty to forty feet in height and interspersed with numerous ponds and marshes. The soil is a sandy loam with a light clay subsoil and is rated as third-class.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The coteau in this township, instead of being a multitude of small hills and mounds, is a large rolling plain, which differs in no way from the plains beyond except in having greater elevation and more numerous small lakes and ponds. There is no wood whatever in the township, but the land is of fair quality and may be rated as first-class. A large pond was crossed in section 31 and a creek, flowing northerly, runs through the central portion of section 34.—C. P. Aylen, D.L.S., 1883.

RANGE 15—Continued.

3. and crosses several marshes. The soil is of second-class quality being a sandy loam with clay and gravel subsoils and should make suitable farming land. Long creek crosses the line in section 24.—C. P. Aylen, D.L.S., 1883.

(Subdivision.)—The northern part of this township is rolling and undulating, and has a soil of first- and second-class quality which consists of sandy and gravelly loams with sand, clay and gravel subsoils. Long creek, which is about two and one-half feet deep and has a current of ten chains per hour and banks eight feet high, flows through the northeastern portion of the township. The eastern portion is very much the same as the north. Generally throughout other portions of the township the land is, as a rule, of fair quality, although a few sections are somewhat inferior. About eighty per cent is of first-class quality and the remainder second-class. There is no wood.—C. P. Aylen, D.L.S., 1883.

(North outline.)—The country along this boundary is undulating prairie 4. with patches of gravel and cactus, and has a soil of second-class quality, consisting of clay loam overlying a clay subsoil. Sections 36, 35, 34 and 33 are partly burnt over and there is a large slough in the west half of section 34.—J. McLatchie, D.L.S., 1881.

(East outline.)—This line runs through undulating prairie, having a sandy loam soil with clay and gravel subsoils and is of first-class quality throughout. No wood nor water was seen.—C. P. Aylen, D.L.S., 1881.

(Subdivision.)—This township contains, perhaps, as good land as can be found in the valley of Long creek which enters in section 30 and leaves in section 3. The alluvial soil is a sandy loam of good depth and fair quality and has a subsoil of tenacious clay. There is an abundance of water at all seasons and large quantities of coal but no wood whatever could be found. Long creek, like all streams in this region, varies greatly in its flow at different times of the year, being quite a large stream in the spring and comparatively insignificant in the fall; its average width is about eighty links, its depth about three feet and its current less than one mile per hour. The land is all first-class.—C. P. Aylen, D.L.S., 1883.

(North and east outlines.)—On the boundaries the country is high and rolling, and is generally fair, arable land. There are some stony ravines, with small brooks in them, running across the township. Sections 31, 32, 33 and 34 are stony and have a heavy clay soil of second-class and third-class quality. A dry stream bed crosses the east half of section 32 and in this and section 33 the surface soil is mostly gone. Sections 35 and 36 contain the best land, having a dark clay loam soil of first-class quality.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—The surface is high and rolling and numerous boulders were met with in some of the ravines. The soil is of the poorest character, having apparently been washed away at some past period by a flood. The subsoil is clay. No timber was seen in this township.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—This township has a high and rolling surface and may be rated as good, arable land. There are some ravines in which small streams are found and in the vicinity of which the land is stony and washed out. Probably about sixty to seventy per cent of the land is available.—T. Fawcett, D.T.S., 1881.

Range 15—Continued.

(Subdivision.)—The land in this township is a little better than that of the township to the south, previously described, but is still only of second-class and third-class quality and is suitable only for pasturage. There is no timber.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—The soil is first-class and suitable either for grazing or agriculture. There are several marshes which run in a diagonal line across the township from the northwest corner.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is open rolling prairie. About four sections in the northwest corner are partly covered by a lake and a marsh; the latter produces long grass and furnishes good water, but the former is rather muddy and its water is not suitable for use. Several small marshes providing good hay and fresh water were met with. The soil is a clayey and sandy loam from six to eighteen inches deep and is generally of first-class quality.—C. G. Sheppard, D.L.S., 1882.

- These townships are from five to fifteen miles from the thriving town of Weyburn. They are reached by good, graded roads, passing through the improved farms of prosperous settlers. The Weyburn to Lethbridge branch of the Canadian Pacific railway passes through township 8, ranges 15 and 16. There are small towns at Tatagua and Yeomans, on this branch, to which the farmers advantageously ship the wheat for which this district is noted. The land which was resurveyed about Shallow lake is prairie, marshy in places and generally with a mucky soil over a clay subsoil. Although submerged by the lake until the last few years, this land produces fine hay and affords rich and abundant pasturage. Shallow lake is now only six to eighteen inches in depth, but the water is fairly fresh. It will probably dry up within a year of two as it has at present no in-flow and but little out-flow. No timber is found, except a few willows around the lake and these are suitably only for fence poles. The climate is well adapted to the maturing of wheat and is not subject to hail-storms. There is no available fuel. No water-powers exist. There are no stone-quarries nor minerals. Prairie-chickens and ducks were fairly plentiful.—G. A. Bennett, D.L.S., 1911.
 - (North outline.)—The country along the north has an inferior soil, compared with the rich soil of Moose mountain, and more stones than are desirable.—
 O. J. Klotz, D.T.S., 1881.

(East outline.)—Along this boundary there is an excellent loamy soil and a gently rolling surface.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is high, dry prairie with a gently rolling surface. Numerous hummocks cause the ground to be lumpy and rough in places and it is more or less strewn with stones. A shallow lake, which is marshy on the northwest and southeast sides, occupies about four sections in the southwest corner of the township. A watercourse, which was dry in September, runs from the southeast margin of the lake in a northeasterly direction to the Souris river, which crosses section 36 diagonally. The soil is from three to eighteen inches deep with a sandy loam or heavy clay subsoil and is chiefly of first-class and second-class quality. No timber was seen.—C. G. Sheppard, D.L.S., 1882.

Range 15—Continued.

(North and east outlines.)—The country along the north outline is best adapted to grazing, the surface being hummocky and in places very rough. In section 31 a creek and several hay meadows were noted. Section 34 is low and wet. Along the east outline the land is rough and very dry. The soil consists of clay loam and may be rated as first-class. There is a large hay meadow in section 24.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land is undulating prairie with no timber of any kind. A large slough crosses the township from northwest to southeast. The soil consists of a top-soil of from two to four inches in depth overlying a clay subsoil and may be rated as third-class; in places it is very hard and stony.—J. Warren, D.L.S., 1882.

(North and east outlines.)—Along the north outline the land is well suited to grazing as there are a few excellent hay meadows. The soil along the east boundary is sandy and clay loam, rating as first-class and second-class, except in section 36 where the land is marshy and rates as second-class and third-class. There is no wood.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie. Water was very scarce at the time of survey (September). Only two marshes were found and there was but little meadow land, but where the grass had escaped the fires the growth was luxuriant. There is no wood. The soil is a hard clay which would be difficult to work in a dry season. Some parts are very stony, particularly the northeast quarter.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—The soil along this line is clay loam, well suited to agriculture. The surface is undulating with numerous marshes and swamps. Grass is plentiful. The water in the marshes is generally of good quality.—A. C. Talbot, D.L.S., 1882.

(East outline.)—Along this line the land is level prairie with a stiff clay soil, rating as second-class. Water is comparatively plentiful. The line is crossed by two streams. There is no wood.—J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land in this township is level or rolling prairie. The soil is first- and second-class consisting of clay loam overlying a clay subsoil. Several small creeks of good water were encountered, and near the centre of the township there are a few small swamps. No wood was found.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—This line crosses rolling prairie with gravel and stones in places. The soil is a rich clay loam, rating as first- and second-class, and is well adapted to agriculture.—A. C. Webb, D.L.S., 1881.

(East outline.)—The land along this line is level prairie. The soil is a stiff grey clay rating as second-class. Water is comparatively plentiful. There is no wood. —J. G. Sing, D.L.S., 1881.

(Subdivision.)—The land in this township is level prairie with good clay loam, and is first-class farming land. A few hay marshes and small creeks were encountered. There is no wood of any kind. The top-soil is generally from three to six inches deep, and overlies a clay subsoil.—Dumais and Michaud, D.L.S., 1882.

RANGE 15—Continued.

(North outline.)—Along this line the country is generally very dry, almost 13. level prairie, although very rough in places. The soil is mostly a stiff, grey clay, rating as second-class. There is no water except in Waskana creek which crosses section 32. This stream has a slow current, and is about three and one-half feet deep (June).—J. G. Sing, D.L.S., 1882.

(East outline.)—The soil along this line consists of a few inches of alluvial soil overlying a clay loam subsoil. The surface is generally level, and in the south part is somewhat low and marshy. Waskana creek, a sluggish stream about fifteen feet wide and three and one-half feet deep, crosses the line in section 24. The banks of this stream are low and gravelly, and in the vicinity there are a few small boulders which can be used for building purposes.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land throughout this township is generally high, rolling prairie. The soil is sandy and gravelly in places, but in general it consists of from three to eighteen inches of clay loam overlying a clay or sandy loam subsoil, and may be rated as first-class with some second-class. Waskana creek which crosses the northeast corner of the township in a northwesterly direction is about eighteen feet wide and has a very sluggish current. The banks are from fifteen to twenty feet high. The north boundary of section 9 and the east boundary of section 8 cross a deep gully which was dry at the time of survey (September).—C. G. Sheppard, D.L.S., 1882.

(East outline.)—Throughout the two southern miles of this line the land is second-class and third-class in quality, having alkaline flats with ponds of bad water. From section 13 north the soil improves very much and changes to a fine clay loam with an alluvial covering about six inches in depth. A few surface stones were seen.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The northern part of the township is rolling prairie with a few marshes and ponds. The south part is level prairie and very dry. Waskana creek crosses the southwest corner. The water in this creek is fresh, but that contained in nearly all the ponds and marshes is alkaline. An old trail crosses the township from north to south. The soil in the north part is a clay loam about two inches in depth overlying a clay subsoil. In the south part it is a stiff clay and may generally be rated as second-class.—J. J. McKenna, D.L.S., 1882.

(North outline.)—The soil along this line is second-class, although of a **15.** fertile, sandy nature. The surface is only slightly undulating, except in the south where it is more broken and has numerous small marshes.—A. C. Talbot, D.L.S., 1882.

(East outline.)—On this line the soil is excellent, being a rich sand and clay loam. The surface is slightly rolling. In section 25 Manybone creek was crossed. This stream is fifteen feet wide and two feet deep, and contains good fresh water. The water of the open ponds is invariably bad, but in those containing grass it is fresh and of good quality.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—The land is rolling prairie with numerous fresh-water marshes and ponds. Manybone creek runs in a northwesterly direction across the northeast corner. The land along its banks is stony. The soil with the exception of a few sandy ridges is a clay loam about three inches deep overlying a stiff clay subsoil, and rates as second-class.—J. J. McKenna, D.L.S., 1882.

Range 15—Concluded.

(North outline.)—Along this line the surface is undulating prairie with some ponds and hay swamps. The land rates as second-class.—W. Pearce, D.L.S., 1881.

(East outline.)—The land along the east outline contains excellent soil, being a rich sand and clay loam, covered with an average depth of ten inches of alluvial soil. Good fresh water may be obtained from ponds.—J. G. Sing, D.L.S., 1882.

(Subdivision.)—This township is composed principally of good land suitable for farming purposes. The soil consists of about four inches of sandy loam overlying a clay subsoil. Good water can be obtained from the small marshes and lakes. There is no wood of any kind.—J. J. Francis, D.L.S., 1882.

RANGE 16.

(East outline.)—The country along the east outline is hilly and heavily rolling prairie, having a sandy loam soil overlying a light clay subsoil. Section 1 is very stony, and is rated as third-class land, while section 13 is gravelly and is rated fourth-class. A large pond was found in the south half of section 12.—A. O. Wheeler, D.L.S., 1883.

(South outline.)—The south outline traverses a rolling and hilly prairie with marshes and ponds, and is generally suitable land for farming purposes. The soil consists of clay and gravelly loams of second-class quality overlying a clay subsoil. There are some stony ridges and some very good hay lands scattered throughout.—

J. McLatchie, D.L.S., 1881.

(Subdivision.)—Generally the Missouri coteau presents more or less well defined ranges of hills, but in this township they are thrown together in utter confusion. The land is of variable quality; some sections are apparently good, while others are covered with boulders. In the southern part the water in the marshes is fresh, while that in the ponds is strongly alkaline. The soil in some places seemed to be impregnated with alkali. No wood was seen in this township. About fifty per cent of the land is first-class and the remainder second-class quality, the soil alternating between sand and clay loams with subsoils of clay and gravel.—C. P. Aylen, D.L.S., 1883.

2. Last outline.)—Along this line the country is rolling and hilly, the elevations ranging from twenty to thirty feet in height. A large pond extends across the north half of section 25, and numerous smaller ponds and marshes are scattered along the line. The soil is generally sandy loam of third-class quality, except in the southern portion of section 24, where it is gravelly and of fourth-class quality.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is, in general, of inferior quality, as much of it is covered with boulders. There are some sections of fairly good land, numerous hay marshes and ponds of fresh water, but no timber. The township generally is rated second-class.—C. P. Aylen, D.L.S., 1883.

(East outline.)—This boundary traverses hilly prairie with numerous large marshes and ponds. The elevations range from forty to sixty feet in height. The soil is a sandy loam with a clay subsoil and is rated third-class.—A. O. Wheeler, D.L.S., 1883.

Range 16—Continued.

(Subdivision.)—The land in this township is uniformly good, being a sandy loam, varying in depth from six to ten inches, with a clay subsoil. It is comparatively free from boulders and, with the exception of two or three saline lakes and ponds, the water is all fresh. There is no wood whatever and, generally speaking, the land is of first-class and second-class quality.—U. P. Aylen, D.L.S., 1883.

(North outline.)—The country along the north outline is undulating and 4. rolling prairie. Sections 36, 35, 34 and 33 are partly low land and have patches of cactus growing on them. Long creek, which contains good fresh water, crosses the line several times in sections 35 and 36 and a large coulée is crossed three times in section 33. Two small coulées were met with in section 31.—J. McLatchie, D.L.S., 1881.

(East outline.)—This outline runs through rolling and hilly country and crosses several large ponds and marshes. The soil is a sandy loam of second-class quality overlying a light clay subsoil. Long creek, which is about four feet deep and has a slow current, crosses section 25 from north to south and a small creek occurs, in a valley about fifty feet deep, in the central part of section 12 but it has no current and the water stands in ponds.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The land in this township is medium with small tracts of more than average quality. A good many boulders occur on the top of the ridges but the slopes are usually free from stones. There are numerous fresh-water ponds, a great many small hay marshes and an abundance of coal as well as some small poplar, about six inches in diameter, in a ravine which opens from the coteau. About eighty per cent of the land is first-class quality and the remainder second-class.—C. P. Aylen, D.L.S., 1883.

(North and east outlines.)—Long creek, which crosses the south end of this township, expands into a lake, about a mile long, at the southeast corner. The greater portion of the surface soil in the north and east appears to have been washed away, leaving a hard, sun-dried, clayey surface which is scattered over with pebbles and boulders. The grasses which grow on this land are very nutritious.—
T. Fawcett, D.T.S., 1881.

(Subdivision.)—This township is practically worthless from an agricultural point of view as there is generally only a sun-dried clayey surface which is scattered over with pebbles and boulders. In a few places nutritious grasses were found, but there is no timber of any description. Long creek runs across the southwest part of the township.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—A branch of the Souris river crosses this township. In the north and east boundaries the surface soil appears to have been washed away leaving a hard, clayey sun-dried surface which is scattered over with pebbles and boulders. However, the grasses which grow on this land are very nutritious.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—The only parts of this township which are suitable for settlement are sections 25, 26, 35, and 36 where there is an alluvial soil about six inches deep overlying a hard clay subsoil. The remainder of the township is level prairie, having a sand and gravel soil and some good grass in places. There is no timber and the land is all of third-class quality.—E. Fafard, D.L.S., 1882.

Range 16—Continued.

- This township is level and rolling prairie having a soil of hard grey clay and in some places sandy loam of second-class and third-class quality, all of which overlies a hard clay subsoil. There are considerable stones, most of which are granite, scattered over the surface. There are some ravines with small creek beds in them which hold some water in pools during the later part of the summer but the water is not very good; some fairly good water was found in section 13. The vegetation was very light, probably owing to the extreme dry weather and frequent frosts. There is no timber.—T. B. Gilliland, D.L.S., 1883.
- (North outline.)—Along the north line the country is very level, but rough and hummocky, and covered with stunted vegetation. On the eastern two-thirds of the line there is a dry marsh several thousand acres in area. Brokenshell creek, which at the time of survey was only a succession of pools, crosses section 32. Wood Mountain trail crosses the line in section 34.—O. J. Klotz, D.T.S., 1881.

(East outline.)—The east outline is crossed by a large marsh which extends from the southeast corner to near the western boundary and supplies great quantities of hay. The land north of the marsh is of excellent quality.—T. Fawcett, D.T.S., 1881.

(Subdivision.)—The south and southwest portions are high, rolling and broken prairie while the north and northeast parts are low, flat and swampy. Marshes are numerous on the east side of the township but the meadow grass is not good. Brokenshell creek is the only running stream, but there is a lake and deep marshes in part of sections 13 and 14; most of the water in these is strongly alkaline. Several dry watercourses were seen and the ground in these was opened up by cracks and deep fissures, indicating the action of much surface water in spring, of extreme drought in summer and frosts in winter. On the high portions of the township the land is hard, being a mixture of sand and gravel and having no alluvial soil. With the exception of cactus, which is fairly abundant, the herbage in this portion is very scant and dry and occurs in patches. On the low land the surface is composed of about six inches of light clay with a stiff, blue clay subsoil and is covered with spear grass and wild oats. The land is rated second-class and third-class with some parts as poor as fourth-class.—H. Lowe, D.L.S., 1882.

(North outline.)—This line runs through rolling prairie except section 36 **9.** which is level and rough. The soil throughout is sand and clay loam and would rank as first-class or second-class. Large marshes are found in sections 31, 33 and 34.—A. C. Talbot, D.L.S., 1882.

(East outline.)—The soil along this line is a hard, whitish clay. It is very rough and would rank as second-class. An indication of the poorness of the soil is given by the cactus plant which is very common.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—This township contains open prairie, generally undulating, with no timber whatever. Some small ponds and hay marshes occur. A small muddy lake with somewhat alkaline water and having no outlet, occupies parts of sections 8, 9 and 16. There is a slough in sections 17 and 18 which extends into the adjacent township. The surface of the ground is very hard and the soil, which is from two to nine inches deep, with a clay subsoil, is of third-class quality.—J. Warren, D.L.S., 1882.

Range 16—Continued.

(North outline.)—The land along this line is rolling prairie with a clay loam soil of first-class quality. A large grassy marsh which extends through sections 31, 32 and 33 completely submerges the northeasterly two-thirds of section 32.—A. C. Talbot, D.L.S., 1882.

(East outline.)—Along this line the surface is undulating. The soil is clay and would rank as first-class. Some large marshes, containing fairly good water, are found. Grass is plentiful and nutritious.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—The soil in this township is a fine loamy clay of first-class quality. A large marsh, surrounded by extensive hay meadows, crosses the township diagonally. All the water is fresh and good. Except for the entire absence of wood this township is admirably adapted to settlement.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—These lines run through an undulating country with numerous marshes and swamps. The marshes contain good water and produce an abundance of excellent grass for pasture.—A. C. Talbot, D.L.S., 1882.

(South outline.)—The south outline is crossed in sections 4 and 5 by a hay marsh, nearly a mile wide, which extends northwest for five or six miles and covers an area of several thousand acres. The soil is generally light and in some places is useless.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—This township is level prairie, with an alluvial soil of from three to six inches over a clay loam subsoil, and is first-class farming land. A large hay marsh lies in the southwest quarter of the township. There is no wood to be had within ten miles. Good water can be had anywhere at a depth of from two to twelve feet.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this outline is rolling and undulating prairie with a clay loam soil. There is a large hay marsh in section 32 and a smaller one in section 31.—A. C. Webb, D.L.S., 1881.

(East outline.)—Along this outline the surface is undulating, and there are many marshes and swamps. The soil is a clay and ranks as first-class. The water in the marshes is good, the grass plentiful, and the pasturage excellent.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—This township contains good wheat land and is well adapted to farming purposes. The soil, which is from five to twelve inches in depth, is a good clay loam with a clay subsoil. Water can be obtained by digging a few feet. There is no wood.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—This line runs through dry rolling prairie except for the central part of section 31 which is low and wet. The soil is first-class being alluvial to a depth of from two to three inches overlying a sand and clay subsoil. There is no wood, and water is not plentiful.—A. C. Talbot, D.L.S., 1882.

(East outline.)—Along the east outline the surface is undulating and there are numerous marshes and swamps containing good water. The soil is a clay suitable for cultivation, and grass is plentiful.—A. C. Talbot, D.L.S., 1882.

Range 16—Concluded.

(Subdivision.)—The township is rolling prairie with no timber. The soil is about eighteen inches deep with a dark clay or clay loam subsoil rating as first-class except two sections in the southwest corner which contain a large marsh with good fresh water. This marsh covers an area of about 1,300 acres. The southeast corner is crossed by a cart trail leading from Wood Mountain to Qu'Appelle. The land is rough in places.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—The north outline is level prairie with a good alluvial soil of from one to three inches in depth over a clay subsoil and ranks as first-class.—A. C. Talbot, D.L.S., 1882.

"(East outline.)—The soil along this outline is clay and would rank as first-class. The surface is undulating with numerous marshes and swamps. The water in the marshes is good and plentiful. Waskana creek, which is about one chain wide and three or four feet deep, crosses the township from southeast to northwest. There is no wood.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—The land in this township is rolling prairie. The soil is eighteen inches deep with a clay loam subsoil ranking as first-class. The northerly portion is drained by several shallow coulées, while the south and southwest portions are traversed by Waskana creek. The banks of this creek which are from twenty to twenty-five feet high, gradually diminish until section 17 is reached where they disappear. The width here is from thirty to forty feet, the depth averages three and a half feet and the current is slow.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—This line crosses country which is slightly undulating. The soil is sandy but fertile and ranks as second-class.—A. C. Talbot, D.L.S., 1882.

(East outline.)—This line crosses country which is slightly undulating except in the south where it is more broken and has numerous small marshes. The soil is sandy but fertile.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—The northerly part of this township is rolling prairie and quite dry except for a few marshes and ponds containing alkaline water. The southerly part is level prairie and very dry. In the north there is about two inches of clay loam overlying a clay subsoil. The south is all a stiff clay. The township would rank as second-class.—J. J. McKenna, D.L.S., 1882.

(North outline.)—Along the north outline the land is undulating with a few ponds in the east half, but drier in the west half. The soil ranks as second-class.—W. Pearce, D.L.S., 1881.

(East outline.)—Along the east outline the land is slightly undulating. It is sandy, but fairly fertile and would rank as second-class.—A. C. Talbot, D.L.S., 1882.

(Subdivision.)—About three-quarters of this township is good, level, farming land with an alluvial soil of about five inches in depth over a clay subsoil. The remaining portion is much broken by ravines. A running stream of fresh water passes through the centre of the township with banks from fifty to one hundred feet high. There is no timber.—J. J. Francis, D.L.S., 1882.

RANGE 17.

- This township was reached from Weyburn by following the settlers' and ranchers' trail to Sandoff's ranch in township 3, range 16, then westward to the northeast corner of township 2, range 17, and from there southward along the east outline of township 2, range 17. The soil in this township is good and well suited for agricultural purposes, although the northeast part of the township is rather hilly. The surface is everywhere prairie with no timber. Redtop and marsh grass of good quality abound in the hay marshes. Good fresh water was easily obtainable in the marshes and sloughs at the time of survey (June), and snowwater was still to be had. No streams nor water-powers occur and the land is not liable to flooding. The climate at the time of survey was cool with light frosts. No fuel, stone-quarries nor minerals were found. Duck was the only game seen.—J. L. R. Parsons, D.L.S., 1907.
 - This township was reached from township 1, range 17, by travelling northward along the central meridian. The soil is light but of fair quality; the south two-thirds of the township being well suited for agricultural purposes while the remainder is very rough and broken. The surface is everywhere prairie with no timber. Marsh grass and redtop of good quality are to be had in the small hay marshes which abound throughout the township. Good fresh water was readily found at the time of survey (June) in the numerous sloughs and marshes. No streams nor water-powers occur, nor is the land liable to be flooded. The climate was cool and wet at the time of survey. No fuel, stone-quarries nor minerals were found. Duck was the only game seen.—J. L. R. Parsons, D.L.S., 1907.
 - This township was reached from the Weyburn trail by travelling south along the east outlines of townships 5 and 4, range 18. The country is rough and 3. hilly and the trail presented heavy grades. The township is crossed diagonally by the police trail running in a southwesterly direction from Weyburn to the Northwest Mounted Police station at Wildman butte, on the international boundary, and this trail is in good condition. The soil is chiefly sandy loam on clay or sandy subsoil and is rather light for farming. The surface is everywhere prairie. north and south outlines are hilly and rough, while the central part of the township is in the form of a basin, and is gently rolling. No timber occurs. Hay may be obtained in the numerous hay marshes and is chiefly redtop and marsh grass of good quality. A marsh containing about one hundred acres occurs in section 2. Fresh water is fairly plentiful in the sloughs and marshes. Crystal, Alma and Wellington lakes are alkaline. No streams nor water-powers occur. The climate is dry and warm and there were no frosts at the time of the survey. No fuel occurs. Coal and wood for camp purposes were obtained at Yellowgrass. No stone-quarries nor minerals occur. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
 - This township was reached from the Weyburn trail in section 2, township 6, range 18, by travelling south along the east outlines of townships 5 and 4, range 18. This route is very hilly and presents heavy grades. The soil is chiefly sandy loam on a sandy subsoil, with gravel in places and is only adapted to grazing. It supports a good growth of buffalo grass. The surface is everywhere prairie. It is very rough and hilly throughout. The hills are from twenty-five to one hundred feet in height, but low hills predominate. No timber occurs. Hay is abundant in the numerous hay marshes and is chiefly redtop and marsh grass of good quality. Fresh water is plentiful in the hay marshes and sloughs. Several alkaline lakes occur. No streams nor water-powers occur. The climate is dry and warm and

RANGE 17—Continued.

there were no frosts at the time of the survey. No fuel occurs. Coal and wood for camp were obtained at Yellowgrass. No minerals nor stone-quarries occur. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.

(North outline.)—The country along this line is undulating and rolling prairie with numerous swamps and meadows; the land is rated second-class and is fairly well adapted to agricultural purposes. Sections 31, 32 and 34 have some surface boulders scattered over them and the north half of section 32 is broken by hills. Long creek, which is about two chains wide, crosses the line twice in section 33. About two-thirds of section 19 is occupied by a large alkaline lake and some meadows were crossed in sections 30 and 31. The soil throughout is composed of sand and gravel.—C. E. Wolff, D.L.S., 1881.

(East outline.)—This boundary traverses an undulating and rolling prairie which is very stony in places. The soil is a clay loam of second-class and third-class quality and has clay and sandy subsoils. Cactus was found growing in sections 24, 25 and 36. Long creek crosses section 13 and in this same section a large slough was met with in the north half.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is, generally speaking, better suited for pasturage than for agricultural purposes. About two-thirds of the township falls within the Missouri coteau and is much broken by valleys, lakes, and ponds, the water in the latter being more or less alkaline. Long creek, a stream of good fresh water, traverses the northern part of the township. There is no timber of any kind.—E. Fafard, D.L.S., 1882.

(North outline.)—Along this outline the country is level and undulating and has a sandy soil of second-class and third-class quality; the surface is generally hard and gravelly. Several marshes and meadows were met with along the line and a dry creek, which had pools of water at short intervals, was crossed in section 32. Some surface boulders were found in section 34.—C. E. Wolff, D.L.S., 1881.

(East outline.)—This outline traverses an undulating prairie which is very stony in places and has a clay loam soil of second-class and third-class quality overlying a clay subsoil. There is a large wet coulée in the north half of section 12, a slough in the north half of section 24 and another rather large one crosses the line three times in section 36 and extends north nearly the whole length of the section.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is part level and part rolling prairie, with a shallow clay and sandy loam in the western portion and principally hard gravelly clay in the east. The surface is very stony in places, and has a very hard clay subsoil with the result that the land is rated second-class and third-class quality. Water is rather scarce, the only supplies being Long creek, which runs through the southwest corner but is not a continuous stream after July, and some ravines containing pools. There was only one swamp noticed, and this was miry and contained very poor water. Vegetation was very light, and there was scarcely any hay in the township. No timber was seen.—T. B. Gilliland, D.L.S., 1883.

(North outline.)—The country along the north outline is level and undulating, and is rated as second-class. A creek bed, having high and steep banks, crosses the line in section 32.—C. E. Wolff, D.L.S., 1881.

RANGE 17—Continued.

(East outline.)—The east outline traverses an undulating prairie, the land of which is poor, dry and lumpy, with cactus growing here and there. The southern part of the line ascends to the height of land dividing the Missouri coteau from the Souris plains.—O J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is level and undulating prairie with some stony patches, and has a soil which is principally hard grey clay mixed with gravel, overlying a hard clay subsoil; in some places there is a clay loam soil, but it is very shallow. Water is very scarce, the only supply being in some ravines and creeks which are nearly dry by the end of July. Some of this water is very bad and could not be used for domestic purposes. Only one swamp was encountered and it was very soft and miry, supplying neither hay nor good water. Vegetation is very light, but cactus plant and sage were abundant. There is no timber.—T. B. Gilliland, D.L.S., 1883.

(North and east outlines.)—The north outline runs through a dry undulating prairie which has a poor soil and a large number of stones, some dried marshes and considerable cactus scattered along the line. A small creek occurs in section 36, and a couple of wet marshes were encountered in section 35. On the east line the surface is level, having a soil which is poor and dry except near the creeks; one of these creeks meanders over section 25 and has maple, ash, oak and cherry along its banks. Eleswhere along this line the watercourses were dry. Wild hops were abundant.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is rolling and broken prairie, the land being highest in the west side and falling towards the northeast. A creek meanders through the centre of the township from section 18 to section 25; in July this was not a continuous stream, but contained good, soft, spring water in numerous ponds and pools along its course. A fine belt of timber about five to ten chains in width fringes the banks of the creek, and is composed of ash, maple, elm and willow in sufficient quantity and size to supply settlers with fuel and building material for some years. The soil, for the most part, is a mixture of clay, sand and gravel to a depth of about six inches overlying a subsoil of clay and gravel. The only alluvial soil to be found is in the flats of the creek and its branches. The surface of the high land is very hard, dry and sometimes stony, supporting a considerable growth of cactus. From the numerous dry watercourses and cracks or fissures, it is evident that this country is subject to extreme heat in summer and cold in winter. This township is not adapted for agriculture nor for stock-raising, as the pasture is insufficient, and what there is is very light and parched. Considerable loose limestone in large blocks was noticed in the sides of the gullies. This district may be rated as having second- and third-class land.—H. Lowe, D.L.S., 1882.

(North outline.)—The north outline is generally level but sometimes undulating and rolling and may be ranked as first-class. The soil is a heavy clay loam well adapted for farming and well watered by hay marshes and creeks. Moosejaw creek, a tributary of Qu'Appelle river, crosses the line in section 34. It is fifty links wide and the banks are about forty feet high. In section 33 the line crosses a shallow, muddy lake about a mile wide and one and a half miles long. The water is slightly alkaline. A large hay marsh extends southeasterly from it. There is a small belt of timber to the southeast of the lake and a few patches of shrubbery fit for fuel only occur along Moosejaw creek.—P. R. A. Belanger, D.L.S., 1882.

Range 17—Continued.

(East outline.)—The east outline has a level surface with a dry, lumpy, inferior soil. A large marsh occupies the east central third of this township.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is open prairie with no timber whatever. The surface is very flat and low and indications point to the probability of the whole township being under water in the spring of the year; but in September the land was quite dry and so very hard that the ground was all cracked. There are three lakes whose areas lie entirely within this township, and part of the area of another is included in the north part. They are all muddy and shallow. A large hay marsh takes in sections 24, 25, 26, 27 and 34, all of which sections are very soft and wet. There is a watercourse running through the middle of the marsh. The surface soil is two or three inches deep over a clay subsoil. It would rank as third-class.—J. Warren, D.L.S., 1882.

(North outline.)—The north outline is level, or undulating and rolling prairie ranking first-class. The alluvial soil is a heavy clay loam eighteen inches deep over a clay subsoil, and well adapted for farming especially wheat growing. It is well watered by hay marshes and creeks.—P. R. A. Belanger, D.L.S., 1882.

East outline.)—The east outline is level with a lumpy, dry, inferior soil.—O. J. Klotz, D.T.S.; 1881.

(Subdivision.)—The township is nearly all prairie with the exception of the southwest corner which is low and flat and cut up by a large marsh in which the water has a peculiar whitish appearance and is slightly alkaline. The soil is clay twelve inches deep with a clay subsoil ranking generally as first-class with some second-class and fourth-class. There is some small ash, elm and willow in the southwest part.—P. Burnett, D.L.S., 1882.

(North outline.)—The north outline is nearly all level prairie with a heavy 11. clay soil about eighteen inches deep and is excellent wheat land. There are some good meadows and hay marshes, and a sluggish creek of fresh water two feet deep crosses section 36.—P. R. A. Belanger, D.L.S., 1882.

(East outline.)—The east outline consists of gently undulating and level prairie with a heavy clay loam soil ranking first-class. It is well adapted for farming with the exception of section 13 which is wet. There is a large lake containing good water in section 24 and another lake of good fresh water three or four feet deep which entirely submerges the southwest quarter of section 13. The remainder of the section is covered by a large hay marsh containing long grass. The water in this marsh is from two to five feet deep. There is also a large marsh in the southerly half of section 12.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is all prairie varying from level to undulating with a clay loam soil twelve inches deep, over a clay subsoil. It would rank as first-class. The eastern portion is much cut up by marshes and lakes.—P. Burnett, D.L.S., 1882.

(North and east outlines.)—The north and east is rolling and undulating prairie with generally a clay loam soil ranking first-class and making excellent farming land. Creeks of good water with slow currents cross sections 1, 12 and 13. A cart trail crosses section 1.—A. C. Webb, D.L.S., 1881.

RANGE 17—Continued.

(Subdivision.)—The land in this township is, as a rule, of excellent quality and well adapted for agricultural purposes. The soil is a dark sand and clay loam averaging from four to six inches in depth. Water can be obtained anywhere by digging a few feet. Wood is to be had within thirty miles to the northeast.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The north outline is level prairie with a clay loam soil over **13.** a white clay subsoil. It ranks as first-class and will make excellent farming land best adapted for wheat cultivation. Small marshes are numerous.—A. F. Cotton, D.L.S., 1882.

(East outline.)—The east outline is rolling or undulating prairie with a heavy clay loam soil of first-class quality. There is no surface water with the exception of two or three marshes in sections 1 and 12.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township consists of rolling prairie with a good heavy soil eighteen inches deep over a clay subsoil. There are ponds and marshes growing hay very thick and long and containing water frequently three feet deep. Three-fourths of this township is probably covered with water in ordinary seasons. Without extensive drainage the township is useless for farming purposes.—E. D. Henderson, D.L.S., 1882.

(North outline.)—The north outline is gently rolling prairie, some parts **14.** being covered with rose brush. The soil is a clay loam over a subsoil of white clay. There is a large marsh in the northwest corner and small marshes occur at intervals.—A. F. Cotton, D.L.S., 1882.

(East outline.)—The country along the east outline is undulating and rolling prairie with a heavy clay soil ranking as first-class and is well adapted for wheat growing. Waskana creek, which crosses the northern half of section 24 and through section 25, is about three feet deep with a muddy bottom. Another creek crossing through the centre of section 25 is about twenty-five links wide and has good fresh water.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie with a soil eighteen inches deep over a clay loam subsoil. It ranks as first-class with the exception of a marsh, in the east half of section 22 and the south half of section 27. This marsh produces good grass and contains fresh water. Waskana creek meanders in a northwesterly direction through sections 25, 26, 27 and 33, between low banks, the land being rather low, lumpy and rough for about a mile on either side. In October, the creek, being swollen by recent rains, was from forty to fifty feet wide and four feet deep.—C. G. Sheppard, D.L.S., 1882.

(North outline.)—The surface along this line is level or rolling prairie with an alluvial soil eighteen inches deep and ranks as first-class. A creek about three feet deep crosses the line three times in section 31, and another creek of about the same size also tributary to Waskana creek, crosses the central portion of section 36 and emerges through section 19. It has banks on the east side of from twenty-five to thirty feet high. A cart trail crosses section 31.—C. Desjardins, D.L.S., 1882.

(East outline.)—Section 1 has a very rough surface and the remainder of the outline is flat hummocky prairie except the southeast half of section 36 which is rolling. The soil is a good strong clay ranking first-class and is well adapted for wheat growing. A ravine, about twelve feet deep, with a creek flowing east through the centre of it crosses the central portion of section 13.—W. Pearce, D.L.S., 1881.

Range 17—Concluded.

(Subdivision.)—This township is undulating prairie with a sandy loam soil over a clay subsoil and ranks as first-class, second-class and third-class. Waskana creek, which flows through this township, contains good water. There are some good hay meadows.—J. L. Reid, D.L.S., 1883.

(North outline.)—The surface along this line is rolling or undulating and the soil in some places is alkaline. It will rank as first-class or second-class. There is a creek in the west half of section 36 and a swamp in section 33.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is rolling prairie with a light, sandy loam soil and ranks as second-class. The southeast half of section 25 is broken by a large ravine and a cart trail runs through the centre of this ravine. The southeast half of section 12 is crossed three times by a creek which flows westward.—W. Pearce, D.L.S., 1881.

(Subdivision.)—This township is fine, dry, level prairie with an alluvial soil of from three to eight inches over a clay or sandy subsoil and is well adapted for agricultural purposes. There are several fresh running creeks but no wood.—J. J. Francis, D.L.S., 1882.

RANGE 18.

- This township was reached from townhip 1, range 17, by following the north boundary westward. It is very hilly. The soil is good, but owing to the north half of the township being very hilly, only the south half is suited for agricultural purposes. The surface is everywhere prairie, rolling in the south half, and very hilly in the north half. No timber was found. Good marsh hay is abundant in the numerous small hay marshes. Fresh water was readily obtainable in the numerous small sloughs and marshes at the time of survey (June). There are no streams and consequently no water-powers. The climate was warm and fine at the time of the survey with no frosts. There are no minerals, stone-quarries nor fuel. The only game noticed was duck.—J. L. R. Parsons, D.L.S., 1907.
- This township was reached from township 1, range 18, by a trail northward along the central meridian. This trail was very hilly in its southern part. The soil is light but of good quality. On account of the hilly nature of the two north tiers of sections and also of the two south tiers, only the centre is suited for agricultural purposes, the remainder being excellent grazing land. The surface is everywhere prairie with no timber. Abundance of good marsh grass and bluejoint are obtainable in the numerous small hay marshes throughout the township. Fresh water was plentiful at the time of survey (June) throughout the township, in the small sloughs and marshes. No streams nor water-powers occur and the land is not liable to be flooded. The climate is moderate, with no frosts at the time of survey. No fuel, stone-quarries nor minerals were found. Duck was the only game.—J. L. R. Parsons, D.L.S., 1907.
- 3. along the north boundaries of townships 3, ranges 17 and 18. The country is rough and hilly and this route presented heavy grades. The soil varies from black loam on clay subsoil, to sandy loam on sandy subsoil, and in a few places gravel. It is only suited to grazing. The surface is everywhere prairie and is rough and hilly in the greater part of the township. The western two tiers of sections are less rolling

Range 18—Continued.

and in places level. No timber occurs. Hay is plentiful in the hay marshes which occupy many of the hollows. It is marsh grass and redtop of good quality. Fresh water may be obtained in the hay marshes and sloughs and was fairly plentiful at the time of the survey, although it would probably be scarce at the end of a dry summer. The four lakes in the township are alkaline. No water-powers occur. The climate is dry and warm, and might be described as moderate. No frosts occurred during the time of the survey. No fuel was found. Coal and wood for camp purposes were obtained at Yellowgrass. No stone-quarries nor minerals were found. The only game is antelopes, ducks, and geese.—J. L. R. Parsons, D.L.S., 1905.

- This township was reached from township 3, range 18, by travelling west along the north boundaries of township 3, ranges 17 and 18. The country is hilly and the trail presented heavy grades. The soil is chiefly sandy loam and sandy subsoil, with some black loam and clay subsoil in the northwestern part and in places gravel (near the lakes). It is only suited for grazing purposes. It supports a fair growth of buffalo grass. The surface is everywhere prairie, and is roughly rolling and hilly almost throughout. No timber occurs. Hay is plentiful in the numerous hay marshes and is chiefly marsh grass and redtop, of good quality. Fresh water may be obtained in the hay marshes and sloughs, which are numerous. The lakes in the township are saline. No water-powers occur. The climate is dry and warm. No frosts occurred at the time of the survey. No fuel occurs. Coal and wood for camp were obtained at Yellowgrass. No minerals were found, and there are no stone-quarries. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
- (North and east outlines.)—The surface along these boundaries is undulating with swamps, marshes and some fine meadow lands scattered about. The soil is a sandy loam, of second-class quality along the north outline and of second-class and third-class quality along the east, as here the land is gravelly in places. There is an alkaline lake in section 24 and a few meadows in sections 25 and 36. Section 12 is quite hilly and has a large number of boulders scattered over the surface; the hills are about sixty feet in height.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is situated in the Missouri coteau. The soil is poor, being of a sandy and gravelly nature and is rated second-class and third-class. There is a fair percentage of fresh water although most of the ponds and lakes are more or less alkaline. The district is entirely devoid of timber but would make good pasture land.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—These lines run over an undulating prairie with several ponds and marshes scattered about, more especially along the east line. There is an alluvial soil from three to six inches deep over a sandy and gravelly, grey clay subsoil; it is rated second-class along the north outline and second-class and third-class along the east. Long creek crosses the north outline in section 34 and the east in section 13, it has high banks and is about one chain wide. Surface boulders were encountered in sections 1 and 12.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is rolling prairie and in some places might be called hilly, there being some fairly high ridges with gentle slopes. There are several branches of Long creek running through the township but most of these consisted only of pools by the middle of July. Several good hay swamps and some ponds of very good water were encountered. The soil is principally a shallow clay loam with a hard clay subsoil and is rated second-class and third-class. The surface is hard and

Townships West of the Second Meridian.

RANGE 18—Continued.

gravelly, with many stones and large granite boulders scattered about. The only alluvial soil found in this part of the country was around the swamps and along the creeks. Vegetation is very light, except in the low or wet land, this is probably on account of the extreme dry weather and frost as it is evident that grass has been much better in former years. The only timber found consisted of some bunches of willows in section 29.—T. B. Gilliland, D.L.S., 1883.

(North and east outlines.)—On these boundaries the surface is alternately 7. level, rolling and undulating, having an alluvial soil, about five inches deep, of second-class quality overlying a sandy and gravelly clay subsoil. This country is fairly well adapted to farming and grazing purposes, and has occasional small marshes and ponds scattered throughout. Long creek, which is here about two feet deep and has a current of one mile per hour, crosses the north outline in section 31 and flows southerly through the township. An old cart trail crosses the north line in section 36.—C. E. Wolff, D.L.S., 1882.

(Subdivision.)—This township is level and rolling prairie, having a clay loam soil about six inches deep overlying a hard clay subsoil. Much of the surface is composed of hard gravelly clay with but few stones, except in the ravines. Long creek and a tributary run southerly through this township, but neither of these was a continuous stream after the middle of July, although good water could be obtained from pools along the beds. A lake, which had sand and gravelly shores and contained good water, was encountered in section 8 and some good hay marshes were scattered throughout. Vegetation is fairly good in the western portion, but very light in the east. There was no timber.—T. B. Gilliland, D.L.S., 1883.

(North outline.)—The country along this outline is dry, undulating prairie 8. with a poor soil. There are several ravines in which some trees and brush were seen, and which usually contain small creeks, but these dry up early in the summer.—O. J. Klotz, D.T.S., 1881.

(East outline.)—This outline traverses a rolling and level prairie with some small marshes scattered throughout. The soil consists of a sandy loam about four to eight inches deep overlying a sandy and gravelly grey clay subsoil, and is rated hirst-class and second-class. The south half of section 25 is greatly broken by a branch of Brokenshell creek, and by the high hills which border the creek on either side. This creek is about twenty links wide and two feet deep, and is fringed with small ash, elm and brush on the south side. Other branches of Brokenshell creek cross this outline in sections 24 and 13, that in the former section being about eighteen inches deep and fifteen links wide with banks about forty feet high. On the north side of this branch there is some elm and ash ranging from six to twenty inches in diameter, and in section 13 there is also a patch of heavy timber consisting mainly of elm and ash. A cart trail to Wood mountain crosses section 1.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township is undulating prairie, having a soil which is of first-class quality in the southwestern portion and of second-class quality in the north-eastern portion. This latter portion of the township is much broken by ravines and watercourses and has a branch of Brokenshell creek running through it, but this was dry during September.—J. Warren, D.L.S., 1882.

(North outline.)—The north outline consists of rolling and level prairie with alluvial soil four to eight inches deep over a gravel and sandy, or grey clay subsoil. It would rank as second-class, and would in general be good for farming and grazing. Several marshes and ponds were crossed. A cart trail to

RANGE 18—Continued.

Qu'Appelle leaves the township in section 34. A meandering stream, tributary to posejaw creek crosses section 36. Willows and some small elms are found along the banks. Section 31 is thickly strewn with surface boulders—C. E. Wolff, D.L.S., 1882.

(East outline.)—The east outline is generally level but in places undulating and rolling with a first-class heavy clay loam soil well adapted for farming purposes. It is well watered by hay marshes and creeks.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The soil in this township, which is composed of hard clay and sand, is of first and second-class quality. A tributary of Moosejaw creek crossing the township in a northeasterly direction contains almost the only surface water. On each side of this stream there is a belt of wood about 150 feet wide composed of maple, elm and ash but the trees are not large enough to be of value for building purposes.— *L. P. Gauvreau*, *D.L.S.*, 1882.

(North outline.)—Along this line the surface is level and the surface soil is alluvial to a depth of from five to ten inches over a sandy or grey clay subsoil. It would rate as second-class. Several marshes occur and there is a lake of good fresh water extending through sections 33 and 34 the presence of which would render this a very desirable locality for settlement.— C. E. Wolff, D.L.S., 1882.

(East outline.)—The land along the east outline is gently rolling with some level prairie. Some parts are marshy and consist of low, wet bottomlands, particularly in section 13. The soil is composed of a heavy clay rating as first-class and third-class, and would generally be excellent wheat land. Moosejaw creek, which is three feet deep and contains muddy water, crosses section 13 in a northwesterly direction. A fresh water creek of about the same depth and with a muddy bottom crosses section 1. There are a few small belts of ash and elm along the shores of this creek.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The land in this township is high, rolling prairie a little rough and stony in the southwest portion. The soil is composed of brown clay overlaying a clay subsoil and would rate as first-class and second-class. The northern boundary intersects a large lake of fine clear water. A creek which is not continuous and has a muddy bottom and low banks flows from this lake. This creek was nearly dry at the time of survey (September) although it would be subject to flooding in the spring. There are numerous watercourses. The land along this stream is very fine and covered with a thick growth of grass. There is no meadow land except along this creek.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—The surface along this line is level or rolling prairie with an alluvial soil of from ten to twelve inches deep overlying a grey clay subsoil. It would rank as first-class. It is excellent land for wheat growing. Several small marshes and hay meadows were crossed.—C. E. Wolff, D.L.S., 1882.

(East outline.)—Along this line the country is nearly all level prairie with a heavy clay soil about eighteen inches in depth overlying a clay subsoil. It would rank as first-class and would make excellent wheat growing land. Some good hay marshes and meadows were seen. There is no water.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—This township is prairie with a good clay loam soil twelve inches in depth overlying a clay subsoil and would be rated as first-class. It is well adapted for agricultural purposes. Moosejaw creek, which crosses the southwest quarter of the township, flows in a northwesterly direction through sections 4, 8, 17, 18 and 19.—
P. Burnett, D.L.S., 1882.

Range 18—Continued.

(North outline.)—The surface along this line is rolling prairie with a heavy clay soil rating as first-class. There are some gravelly ridges but the land as a whole would be excellent for wheat growing.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is level prairie and there are several marshes and some low, wet bottomlands. The soil is a heavy clay overlying a clay subsoil and would rank as first-class. It is admirably suited for the production of wheat.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie with a dark sandy or clay loam of from three to six inches in depth. Good water can be obtained in almost every part of the township by digging a few feet from the surface. There is no wood of any kind.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this line is gently rolling prairie with a clay loam soil over a white clay subsoil. There are many small marshes with one large one in sections 32 and 33.—A. F. Cotton, D.L.S., 1882.

(East outline.)—The surface along this outline is level prairie with a clay loam soil ranking as first-class. It is well adapted to farming and grazing. There is plenty of fresh water in the sloughs and marshes.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie and appearances indicate that the water lies a long time on it in the spring rendering it rather wet for agricultural purposes. There are a few small ponds. The soil is from twelve to fifteen inches deep overlying a clay loam subsoil and would rank as first-class.—
E. D. Henderson, D.L.S., 1882.

(North outline.)—This line crosses level prairie with an alluvial soil of about eighteen inches in depth which is well adapted to farming. There are several large marshes. A cart trail crosses section 31.—C. Desjardins, D.L.S., 1882.

(East outline.)—The land along this line is excellent for farming purposes being composed of a clay loam soil of first-class quality. Sections 24 and 25 are covered by a large sheet of water, and there is also a large marsh covering the north half of section 36.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating prairie with a soil eighteen inches deep overlying a clay loam subsoil and rates as first-class. The eastern portion is interspersed with a few good grass marshes the principal one occupying most of sections 24, 25 and 26. There is no timber of any kind.—C. G. Sheppard, D.L.S., 1882.

(North and east outlines.)—These lines cross level prairie with a good, deep, friable loam soil which is inclined to be more marshy than that in township 16. Waskana creek, a stream three chains wide and three feet deep, enters this township in section 24. A marsh twenty-two chains wide lies along the north shore.—C. Desjardins, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie with a soil of from ten to twelve inches deep. The southeast portion is low and wet. Waskana creek crosses the northeast quarter of the township in a northwesterly direction.—J. Bourgeois, D.L.S., 1882.

Range 18—Concluded.

(North outline.)—The surface along this line is slightly undulating prairie and is very hummocky. The soil is composed of a heavy clay ranking as first-class, and is excellent wheat land. Excepting a small creek which crosses section 3 in a westernly direction, there is very little water. No wood was found along this line.—W. Pearce, D.L.S., 1881.

(East outline.)—Along this line the land is level prairie formed of a good, deep friable loam ranking as first-class and well adapted for the growth of all crops.— C. Desjardins, D.L.S., 1882.

(Subdivision.)—This township is composed of good level farming land with an alluvial soil three inches deep overlying a clay subsoil. Waskana creek, which contains good fresh water, crosses the township in a northwesterly direction. At the time of survey some settlers were located along its banks.—J. J. Francis, D.L.S., 1882.

RANGE 19.

- This township is most readily reached from Weyburn by taking what is known as the French trail as far as a country store in township 5, thence a 1. trail to the police barracks as far as township 3 and thence going across The soil might be suitable for crop raising, but the entire township, with the there it is little more than a track and hard to follow. There is an old Indian trail crossing this township leading in the direction of Weyburn. The soil is a clay loam with a hard clay subsoil. There is considerable gravel in places and alkali on the low ground. The soil might be suitable for crop-raising, but the entire township, with the exception of a few quarter sections, is much too hilly. No timber or scrub of any kind grows in this township. Hay is very scarce as there are very few hay sloughs, particularly south of the large lakes. There are two large lakes and one somewhat smaller in this township, but they are all extremely salty. A few springs along their shores furnish about the only fresh water to be found. A very small stream flows into the westerly lake from the north, but it is rather alkaline and dry for most of the summer. There are no water-powers. The climate is very dry. No summer frosts were noticed, but there were late spring and early fall frosts. The winters are reported to be severe, but stock can winter out without protection. There is no fuel in the township, but lignite is available in township 1, range 22. No stone-quarries nor minerals were noticed. A few antelopes and ducks were seen.—I. J. Steele, D.L.S., 1908.
- 2. known as the French trail as far as a store in township 5, range 19, thence a trail to the police barracks as far as township 3, range 19, thence across country. This trail is a good one as far as the store, except in the spring. Beyond the store it is little more than a track and hard to follow. The soil is a clay loam with a clay subsoil. There is considerable gravel in places and alkali in the valley of a small creek. The soil is suitable for crop raising wherever the ground is sufficiently level, but with the exception of a few quarter sections the whole township may be described as hilly. No timber whatever grows in this township. Hay is not very plentiful, as there are not many hay sloughs, most of them being in the easterly part of the township. These sloughs furnish the only supply of fresh water. A small creek rises in the township and flows out at the southeast corner of section 5, but the water is rather alkaline and fit only for stock. There are no water-powers on it. The climate is very dry. No summer frosts were noticed, but there are late spring and

Range 19—Continued.

early fall frosts. The winters are reported to be severe, but stock can winter out without protection. No fuel whatever is found in the township, but coal is available in township 3, range 21. No stone-quarries nor minerals were found. A few antelopes, ducks and one deer were seen.—I. J. Steele, D.L.S., 1908.

- This township is most readily reached from Weyburn by taking what is known as the French trail as far as a store in township 5, range 19, thence a 3. trail to the police barracks which passes through the township. is a good one as far as the store except in the spring, but beyond it is little more than a track and hard to follow. The soil is a good clay loam with a clay subsoil, and appears to be suitable for crop raising. Most of the township may be described as rolling prairie, but it is quite hilly in the northeasterly corner. No timber nor scrub grows. Hay is not very plentiful as there are not many hay sloughs, most of what there is being in the northeasterly part of the township. There is a good fresh water lake in sections 4 and 5. This, together with the sloughs, furnishes the only supply of fresh water. There is also a small alkaline lake in sections 24 and 25. There are no streams and of course no water-powers. The climate is very dry. summer frosts were noticed, but there are late spring and early fall frosts. The winters are reported to be severe, but stock can winter out without protection. fuel whatever is found in the township, but coal is available in township 3, range 21. No stone-quarries nor minerals were noticed. A few antelopes and ducks were seen.— I. J. Steele, D.L.S., 1908.
- This township is most readily reached from Weyburn by taking what is known as the French trail as far as township 5, range 19, thence a trail to the police 4. barracks which passes through this township. The trail is a good one as far as township 5, range 19, except in the spring. Beyond there it is only a track and is difficult to follow. The soil is a clay loam with a clay subsoil. There is some gravel in places. The soil would be suitable for crop raising but the whole township with the exception of a few quarter sections is much too hilly. No timber nor scrub of any kind grows in the township. There is considerable hay of fair quality as there are a great many hay sloughs in every part of the township. These sloughs together with a few small lakes furnish a good supply of fresh water. There are no streams and consequently no water-powers. The climate is inclined to be dry but not so dry as a little farther west. No summer frosts were noticed but there were late spring and early fall frosts. The winters are reported to be severe but stock is able to winter out without protection. No fuel whatever was found in this township but coal is available in township 3, range 21. No stone-quarries nor minerals were noticed. A few antelopes and ducks were seen.—I. J. Steele, D.L.S., 1908.
- (East outline.)—This boundary runs through undulating prairie which is interspersed with marshes and meadow lands. There is a large lake near the boundary of section 1 and also a large marsh, which contains good water, in section 12. The soil, south of the lake, is sand and gravel and is rated only third-class, while that north of the lake is generally of second-class quality. A cart trail crosses the line in section 25.—C. E. Webb, D.L.S., 1881.

(Subdivision.)—The township was reached from township 5, range 20, by travelling along the north boundary of townships 5, ranges 19 and 20 which affords easy access. The soil is a black loam on a clay subsoil in the southern and eastern portion of the township and is suited to all classes of agriculture, while the remainder of the township is hilly and the soil sandy and stony. It, however, supports a heavy

Range 19—Continued.

growth of grass and is excellent grazing land. The surface is everywhere prairie. It is rolling in the south and east parts and roughly rolling and hilly in the remaining part. No timber occurs. Hay is abundant throughout the township in the numerous small marshes which occur in the low ground. It is marsh grass and redtop, of good quality. The water in the township is fresh and permanent, and is found in the lakes and numerous marshes. No streams nor water-powers occur. The climate is moderate with no frosts at the time of the survey. No fuel nor stone-quarries occur in the township. No economic minerals occur. The only game is ducks and antelopes.—J. L. R. Parsons, D.L.S., 1905.

6. (East outline.)—Along this line the country is undulating prairie with a number of marshes, swamps and meadows, some of which are quite dry. A range of hills runs through sections 13, 25 and 36; in section 25 they rise to a height of 100 feet. A small creek, which runs westerly into Long creek, crosses the line in the south half of section 36. The land is rated first- and second-class throughout.—C. E. Wolff, D.L.S., 1881.

(Subdivision.)—This township was reached by the old patrol trail to Willowbunch which crosses the northern part of the township, and which, at the time of the survey, was in excellent condition. The northwest half of the township (approximately) is composed of a dark loam on a clay subsoil and is good farming land, while the remainder lying to the southeast is roughly rolling and hilly and only suitable for grazing. The surface is everywhere prairie. No timber occurs. Hay is fairly plentiful in the southeast part in the numerous hay marshes. The northern part of the township is crossed by Gibson creek which at the time of the survey was not running. Water was, however, standing in occasional deep holes. The creek has cut a bed about fifteen feet deep and the adjoining land is not liable to flooding. No water-powers occur. The climate is moderate, with no frost at the time of the survey. Fuel is very scarce. Occasional bunches of small willow are to be found along the bed of Gibson creek, but this supply has been almost exhausted by the settlers this summer. No coal was found, and no economic minerals occur. The only game is ducks, geese and antelopes. A few pike are found in Gibson creek.—J. L. R. Parsons, D.L.S., 1905.

The country along this boundary is rolling, level and undulating prairie with numerous ponds and hay marshes scattered about. There is an alluvial soil, from six to twelve inches deep, on a sandy and gravelly clay subsoil; it is of first-class and second-class quality all along the line. Section 1 is greatly cut up by a high range of hills but, on the whole, the land in this district should be good for agricultural purposes.—C. E. Wolff, D.L.S, 1882.

(Subdivision.)—This township was reached from township 7, range 20, by means of the old patrol trail running westerly from Weyburn to illowbunch. It follows the correction line closely and was in excellent condition at the time of the survey. The soil is chiefly sandy loam on a sandy or clay subsoil, but in places it becomes a black loam on clay, while in the hills it is gravelly. Except in the central western part, where the hills from the northwest break off, the township is excellently suited for agricultural purposes. The surface is prairie. No wood of any kind occurs in the township. The surface is generally rolling but in the southeastern part is level; and in the central western part hilly. But few hay marshes of any size occur. The largest is in the southwest quarter of section 26, and contains about seventy-five acres. Another occurs in section 15 to the northwest of Cockburn lake and contains about seventy-five acres. Small marshes are frequent in the more rolling (western) part of the township. The water in the hay marshes at the time of the survey was fresh. The

Range 19—Continued.

water in Cockburn and Kinghorn lakes is alkaline. A dry creek-bed crosses the south outline several times. At the time of the survey there was no water running in it, but fresh water was standing in the deeper holes. This appears to be a branch of Long creek. Its banks are from ten to fifteen feet high which removes any possibility of flooding. No water-powers occur. At the time of the survey the climate was moderate, with a great deal of rain. No frosts occurred. No fuel—either coal or wood—was found in the township. No stone-quarries occur, and no economic minerals were found. The only game is ducks and antelopes. The even sections in this township had nearly all been squatted upon by the time the survey was completed, and land seekers were daily coming into the country. This section of country is locally known as the "Gap." The hills break here and leave a big tract of good farming land which stretches to the west and southwest.—J. L. R. Parsons, D.L.S., 1905.

(North outline.)—Along the north outline the country is dry, undulating prairie with a few small shallow marshes. Section 35 is somewhat stony and supports a light growth of cactus.—O. J. Klotz, D.T.S., 1881.

(East outline.)—The country traversed by this boundary is rolling and partly level prairie, having a soil from five to eight inches deep overlying a gravelly, grey clay subsoil. In section 36 the land is of second-class quality while in all the remaining sections along the line it is of first-class quality. A creek, which is about two feet deep and has a current of one mile per hour and high banks, flows through sections 1 and 12. Another creek, which also has high banks, flows southeasterly through section 1. The land in this district is well adapted for either farming or grazing purposes.— C. E. Wolff, D.L.S., 1882.

(Subdivision.)—The township was reached by a trail running in a southwesterly direction from Yellowgrass; it is the trail used by the farmers in the vicinity and a branch of it continues to Willowbunch. From the point where it branches to the west to Willowbunch I continued to the southwest to the centre of the township. The soil is a sandy loam over clay, the loam varying from two to six inches. It is considered by a number of land seekers, who have visited my camp, of excellent quality for wheatraising, but cannot be classed as number one along with the richer black loam land situated near Yellowgrass. However, there is the opinion that some of the richer soils are too heavy for early ripening of grain. The surface is gently rolling prairie. Dry lake is the only source of water in the township. Its water is fresh and permanent. It was without outlet at the time of the survey; its banks are well defined and there is little danger of flooding. A large hay marsh surrounds the northeasterly part of Dry lake in section 22, containing about fifty acres. No other hay marshes of any extent were seen. No water-powers occur. The climate is temperate and there were no frosts at the time of survey. No wood nor coal occurs in the township. Firewood for the camp was hauled from a coulée, eight miles east of Dry lake. No stonequarries nor economic minerals occur. The only game is geese, ducks and antelopes. —J. L. R. Parsons, D.L.S., 1905.

(North outline.)—The surface along this line is open prairie broken by ravines. The soil is composed of hard clay mixed with gravel and stones. It is suitable for agricultural purposes. In the spring there is an abundant supply of water in the ravines, but it becomes quite scarce in the summer.—P. R. A. Belanger, D.L.S., 1882.

(East outline.)—The surface is composed of rolling, undulating or level prairie with an alluvial soil of from four to six inches in depth overlying a gravelly and grey

Range 19—Continued.

clay subsoil. It would rank as second-class. This land is well adapted to grazing and agricultural purposes. A large marsh was crossed in section 13. Section 12 contains some good hay land in the valley. A tributary of Moosejaw creek crosses the north quarter of section 24. Ash and elm, averaging eight inches in diameter, grow along its banks. The remainder of this section is cut up by hills and ravines. Part of section 36 is thickly strewn with surface boulders.—C. E. Wolff, D.L.S., 1882.

(Subdivision.)—The land in this township is mostly open, undulating prairie. In the southern part the soil is composed of clay loam rating as first-class while in the northern portion it is stony in places and consequently ranks as second-class and third-class. The northeastern portion contains a limited supply of small timber only fit for firewood. The northern portion is hilly being broken up by ravines and deep watercourses. The dry bed of a stream (Moosejaw creek) traverses the township from west to east. There was no running water in its limits at the time of survey (October).—J. Warren, D.L.S., 1882.

(North outline.)—The surface along this line is open prairie broken by stony ravines. The supply of water in the ravines is abundant in spring but becomes quite scarce in summer. The soil is composed of a hard clay mixed with gravel and stones but it is suitable for agricultural purposes. There are a few patches of shrubbery.—P. R. Belanger, D.L.S., 1882.

(East outline.)—The land along this outline is rolling, undulating or level prairie. The soil is from six to eight inches deep overlying sand, gravel and black clay subsoils and rates as second-class. Dry watercourses cross sections 12 and 25. There is a large slough and coulée in section 36. Sections 1 and 24 are thickly strewn with surface boulders.—C. E. Wolff, D.L.S., 1882.

(Subdivision.)—A portion of this township is very rough and much cut up by large ravines the bottom and sides of which are strewn with boulders. The remainder is generally rolling prairie and fairly good. The soil throughout is hard clay and in places stony. There are numerous creeks and watercourses and the grass is very scarce. There is no wood.—S. L. Brabazon, D.L.S., 1882.

(North outline.)—The surface along this line is generally level with some 11. undulating and rolling prairie. The soil is a heavy clay loam of first-class quality well adapted for cultivation. It is well watered by hay marshes and creeks.—P. R.A. Belanger, D.L.S., 1882.

(East outline.)—The surface along this outline for the first two and a half miles going south, is rolling prairie with a stretch of marsh about two-thirds of a mile wide in section 25. In section 24 the line crosses Moosejaw creek which runs in a northwesterly direction through a valley about forty chains wide. This stream-has a depth of three feet and a slow current. South of the creek the surface is all level prairie but the soil is not quite so good as along the first part of the line. Several hay marshes occur in the adjoining portions of sections 12 and 13. There is no wood.—C. E. Wolff, D.L.S., 1882.

(Subdivision.)—The land in this township is generally very level prairie with an excellent soil ranking as first-class and producing a luxuriant growth of grass. Moose-jaw creek, which runs across the northeast corner of the township, contains a limited supply of fairly good water. This creek is from forty to fifty links wide and its banks are generally low. It has a soft and muddy bottom. Some willow brush was found in places along the margin of this creek.—S. L. Brabazon, D.L.S., 1882.

Range 19—Continued.

(North outline.)—The surface along this line is rolling or und nating prairie

12. The soil is a clay well adapted for farming and ranks as first-class.—A. C. Webb, D.L.S., 1881.

(East outline.)—The country along this outline is level or rolling prairie with a rich black loam soil twelve to fifteen inches deep overlying a grey clay subsoil. It is good farming land and well adapted to wheat growing. There is a marsh in section 12 about helf a mile wide. North of this a number of smaller ones occur at intervals.—C. E. Wolff, D.L.S., 1882.

(Subdivision.)—This township is all prairie, part level and part undulating with a clay loam soil twelve inches deep overlying a clay subsoil. Moosejaw creek traverses the southwest portion of the township.—P. Burnett, D.L.S., 1882.

(North outline.)—The land along this line is gently rolling prairie with a clay loam soil of first-class quality. It is excellent farming land. There is a large marsh in the north half of section 34.—A. F. Cotton, D.L.S., 1882.

(East outline.)—Along the east outline the surface is gently rolling prairie with an alluvial clay loam soil overlying a white clay. There are a few hay marshes. On the whole this is good farming land best adapted to wheat growing. There is no wood. —A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating prairie with a very heavy clay soil overlying a clay subsoil. It is rated as first-class.—P. Burnett, D.L.S., 1882.

(North outline.)—The surface along this line is level prairie with a first-class soil admirably adapted for wheat growing.—A. F. Cotton, D.L.S., 1882.

(East outline.)—The surface along this outline is gently rolling prairie with a good clay loam soil over a subsoil of white clay. The land is good for farming, especially wheat growing. There is a large marsh in the north half of section 13, and a smaller one at the northern limit of section 25, near which a cart trail is located.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The land in this township is all level prairie with a soil of first-class quality, and is well adapted for agriculture. There are two large lakes and several marshes in the township.—J. Bourgeois, D.L.S., 1882.

(North, east and south outlines.)—The surface along these lines is level or slightly undulating prairie ranking as first-class, and it is admirably adapted for grain growing. There are a number of small marshes along the north and east boundaries, but many of them are dry.—C. Desjardins, D.L.S., 1882.

(Subdivision.)—The land in this township is open prairie with a level surface. The soil is from eight to ten inches deep and ranks as first-class.—F. E. Brunelle, D.L.S., 1882.

(North outline.)—The surface along this line is rolling, undulating and very 16. hummocky prairie with a heavy clay soil which ranks as first-class. Waskana creek, a stream four feet deep, with marshy edges and no current, crosses the north half of section 36.—W. Pearce, D.L.S., 1881.

Townships West of the Second Meridian.

Range 19—Concluded.

(East outline.)—The surface along this outline is slightly undulating or level prairie with a good quality of loam soil, friable and not too heavy, which ranks as first-class. There are some small marshes, and Waskana creek flows northwesterly across section 36.—C. Desjardins, D.L.S., 1882.

(Subdivision.)—The land in this township is first-class prairie with a black loam soil over a heavy clay subsoil. All the even numbered sections in this township were taken up by squatters who had erected board shanties on their respective claims. There is no hay and very little water.—J. J. Francis, D.L.S., 1882.

RANGE 20.

- This township is most readily reached from Weyburn by taking what is known as the French trail as far as township 5, range 19, and thence a trail to the police barracks which passes through this township. This trail is good as far as township 5, range 19, except in the spring. Beyond there it is little more than a track and is hard to follow. The soil is a clay loam with a clay subsoil. There is considerable gravel in places and alkali in the low ground. It might be suitable for crop raising but most of the township is much too hilly, only a few sections in the western part being sufficiently level. Hay is not very plentiful as there are few hay sloughs. These sloughs together with a few springs in the creek valley and along the lake shore, furnish a very limited supply of fresh water. The creek itself is rather alkaline, and dry during most of the summer. The lake in the easterly part of the township is too alkaline to be of any use. The climate is very dry. The grass in this township stopped growing and matured early in July. No summer frosts were noticed but there are late spring and early fall frosts. The winters are reported to be severe but stock is able to winter out without protection. No fuel whatever was found in this township but coal is available in township 1, range 22. No stone-quarries nor minerals were noticed. A few antelopes and deer were seen.—I. J. Steele, D.L.S:, 1908.
- This township is most readily reached from Weyburn by taking what is known 2. as the French trail as far as township 5, range 19, thence a trail to the police barracks passing through this township. This trail is good as far as township 5, range 19, except in the spring. Beyond there it is little more than a track and hard to follow. The soil is a clay loam with a clay subsoil. There is considerable gravel in places, and alkali on the low ground. The soil in places might be suitable for crop raising but the entire township is much too hilly. No timber or scrub of any kind grows in the township. Very few hay sloughs are found but there is considerable hay of fair quality in the creek valley. These sloughs furnish the only supply of fresh The creek running through the township is slightly alkaline and is dry most of the summer. The lake in section 18 is also alkaline. There are no water-powers on the creek. The climate is very dry. No summer frosts were noticed but there were late spring and early fall frosts. The winters are reported to be severe but stock can winter out without protection. There is no fuel whatever in the township unless there are underlying seams of coal, but coal is available in township 3, range 21. No stonequarries nor minerals were found. A few antelopes and ducks were seen in this township.—I. J. Steele, D.L.S., 1908.
- This township is most readily reached from Weyburn by taking what is known as the French trail as far as a country store in township 5, range 19, from there a trail to the police barracks as far as township 3, range 19 and thence across country. This trail is a good one as far as the store, except in the spring. Beyond there it is little more than a track and hard to follow. The soil is a clay loam with a

Range 20—Continued.

hard clay subsoil and considerable gravel in places. The soil might be suitable for crop raising but the entire township, with the exception of a few sections in the north-easterly corner, is altogether too hilly. No timber nor scrub of any kind grows in this township. Hay is rather scarce as there are very few hay sloughs. There is a fair supply of fresh water supplied by those sloughs and a number of small lakes and reedy marshes. There are no streams, and, of course, no water-powers. The climate is very dry. No summer frosts were noticed but there were late spring and early fall frosts. The winters are reported to be severe but stock is able to winter out without protection. There is no fuel within the township unless there are underlying seams of coal, but coal is obtainable in township 3, range 21. No stone-quarries nor minerals were noticed. A few antelopes were seen in this township.—I. J. Steele, D.L.S., 1908.

- 4. as the "Gap" trail as far as township 6 and thence going across country. This trail is a good one, except in the spring. The soil is a clay loam with a clay subsoil. There is considerable gravel and stone in places. The soil might be suitable for crop raising but most of the township is much too hilly, particularly the western part. No timber nor scrub grows in the township. There is a fair quantity of hay, as quite a few hay sloughs are scattered throughout. These sloughs with several fresh water lakes form a good supply of fresh water. The lake at the northeast corner of section 16 is slightly alkaline. There are no streams and consequently no water-powers. The climate is very dry. No summer frosts were noticed but there were late spring and early fall frosts. The winters are reported to be severe but stock can winter out without protection. There is no fuel whatever in this township, but lignite is available in township 3, range 21. No stone-quarries nor minerals were noticed. A few antelopes and ducks were seen.—I. J. Steele, D.L.S., 1908.
- (East outline.)—Along this line the country is hilly prairie, the hills averaging from forty to ninety feet in height. There are several large swamps and ponds, and a large alkaline lake is situated in sections 1, 12 and 13. This locality is not well adapted for farming purposes.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township was reached from township 5, range 21, by travelling along the north boundary of the township giving a good trail with no grades. The soil, almost throughout the township, is a black loam over a clay subsoil, and is good farming land. Immediately adjoining the south boundary it becomes sandy and rolling, and is only grazing land. The surface is everywhere prairie. Hay is plentiful in the numerous small hay marshes and is marsh grass and redtop. Fresh water is plentiful in the sloughs and marshes. Several lakes occur in the southeast part of the township which are slightly alkaline. No streams nor water-powers occur. The climate is moderate with no frosts at the time of the survey. No fuel was found in the township and fuel for camp was obtained at Yellowgrass. No stone-quarries nor economic minerals were found. The only game is geese, ducks and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(East outline.)—This boundary traverses a rolling prairie. Several creeks cross the line in sections 12, 13, 24 and 25 and two cart trails were encountered in the southeast half of section 36. The soil is a clay loam of second-class and third-class quality overlying a heavy clay subsoil. This locality is fairly well adapted for farming.—A. O. Wheeler, D.L.S., 1883.

(Subdivision).—This township was reached from township 6, range 19, by my own trail westward. The country through which the trail passes is gently rolling, so that there are no heavy grades on it. The soil is of excellent quality, being chiefly

Range 20—Continued.

black loam to a depth of from four to six inches on a clay subsoil. It is suited for all classes of agricultural purposes. The surface is gently rolling prairie throughout. No timber occurs in the township. Hay is plentiful. A marsh containing about fifty acres occurs in the north part of section 35, and small hay marshes are numerous, being found in the hollows. The hay is a good quality of marsh grass and redtop. The water throughout the township is fresh and at the time of the survey was plentiful, but it is probable that at the end of a dry summer it would be scarce. Two dry creek beds cross the southeastern portion of the township in a general northeast direction. No water was flowing in them at the time of the survey, but the deeper holes still contained a small quantity of fresh water. These streams have cut channels from ten to twenty feet deep so that there is no danger of flooding and they afford natural drainage for the adjoining land. No water-powers occur. The climate was moderate at the time of the survey with frequent rains. No frosts occurred. No fuel was found in the township, coal and wood for camp purposes being obtained at the railway at Yellowgrass. No stone-quarries nor economic minerals occur. The only game is antelopes and ducks.—J. L. R. Parsons, D.L.S., 1905.

(East outline.)—This district varies from rolling to very hilly land, and has numerous small marshes and ponds scattered throughout. A large pond occupies many acres in the south of section 36, and a dry coulée was crossed in section 25. This locality is too hilly and broken for farming purposes, but would make fair grazing lands.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township was reached from township 7, range 21, by the old patrol trail to Willowbunch which runs westerly along the southern boundary of township 7, in ranges 19, 20 and 21. It was in excellent condition at the time of the survey. Roughly speaking, the northwest half of the township lies in the hills, and the soil in this part is light, being chiefly a sandy loam on a sandy or gravel subsoil and is only suitable for grazing purposes, while the southeastern portion is less rolling and the soil a black loam or a sandy loam on a clay subsoil and is suited for agricultural purposes. The surface is rolling prairie. No timber occurs. A large hay marsh occurs in section 6 containing about one hundred acres. The hay is chiefly redtop of excellent quality. There is also a large hay marsh in the southwest part of section 1 containing about seventy-five acres, and throughout the township in the hollows between the high ground there are numerous small hay marshes, so that hay is everywhere plentiful. At the time of the survey the numerous hay marshes and sloughs all contained fresh water, but it is probable that toward the end of a dry summer water would be scarce. No streams occur. The land is not liable to flooding. climate is moderate with no frosts at the time of the survey, and is well suited for agriculture. A good deal of rain fell during the time of the survey. No fuel occurs in the township. Coal for camp purposes was obtained from Yellowgrass. No stonequarries occur. The only game is ducks and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(North outline.)—Along this line the country is dry, undulating and level prairie, having several grassy valleys which contain creeks in the early spring. The soil is of medium quality. Towards the west the surface becomes more undulating.—O. J. Klotz, D.T.S., 1881.

(East outline.)—The east line runs through rolling prairie land and crosses several marshes, some of which contain water. The soil is sandy and clay loams with sand and clay subsoils, and averages second-class and third-class quality. A cart trail from Qu'Appelle to Wood mountain crosses section 24. This locality has fair farming land.—A. O. Wheeler, D.L.S., 1883.

Range 20—Continued.

(Subdivision.)—This township was reached from township 8, range 19, by an old trail which we were able to pick up west of Dry lake, running in a westerly direction through about the centre of the township. The soil is a sandy loam, over a clay and sandy subsoil, and is suited to all classes of agriculture. Part of the land was classed as number one and part as number two, some of it being of very fine quality, although nowhere was the very rich black loam encountered. The surface is rolling prairie throughout with some rough hilly country in the southwest corner. No timber occurs. A hay marsh containing about seventy-five acres occurs in sections 14 and 15; no other hay marshes of any size were found, although small grassy sloughs are numerous throughout. The water is fresh and everywhere obtainable, the sloughs being all well filled at the time of the survey. It is probable, however, that toward the end of the summer water will be scarce. No streams occur. The climate is moderate, with hot days and cool nights. A slight frost occurred on the night of May 27. No wood nor coal occurs in the township. Wood for camp was obtained in a very rough ravine in township 9, range 20. No stone-quarries occur, and no economic minerals were found. The only game is ducks, geese, grouse and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(North and east outlines.)—The surface along these lines is generally level **9.** with some undulating and rolling prairie. The soil is a heavy clay loam ranking as first-class and is well adapted for farming purposes. The land is well watered by hay marshes and creeks.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The land in this township is admirably adapted for farming. The soil is a deep, easily-worked clay of very rich quality. The centre of the township is occupied by a large, deep marsh which from the quantity of water in it might almost be termed a lake. Towards the southeast it becomes dry, and here an inexhaustible supply of hay can be obtained. The water is fresh and good. This township slopes from the north to the foot of the Missouri coteau, which is here very sharply defined. In consequence of this, sections 5 and 6 are too much broken to be of any value for agricultural purposes.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—Along these lines the surface is rolling prairie **10.** broken by ravines in which are an abundance of stones suitable for building purposes and also pools of water. Two fine creeks were crossed in section 24 and another one in section 34, the latter flowing northeast. There are patches of shrubbery in some of the ravines and the soil is ranked as first-class and second-class.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The land in this township is very rough and broken by deep ravines and gullies which are dotted with boulders of all sizes. The soil, which is unfit for agriculture, is chiefly a hard lumpy clay with no alluvial covering. The water in the creek, flowing through the northern part of the township, is unfit for use, being strongly alkaline. Fresh water is very scarce.—S. L. Brabazon, D.L.S., 1882.

(North and east outlines.)—The surface along these lines is undulating and 11. rolling or level prairie. The soil is a heavy clay loam well adapted to wheat growing. Two creeks were crossed in section 35 and one on each of the following sections, 33, 24 and 13, the latter flows northwesterly.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The greater part of the southern portion of this township is very rough and unfit for cultivation on account of deep ravines, the sides and bottoms of which are thickly strewn with boulders. On the northern part the land is a beautiful

RANGE 20—Continued.

level plain, rather low but capable of easy drainage. The soil is a fine brown clay. It is watered by two creeks in both of which the water is alkaline and of inferior quality.

—S. L. Brabazon, D.L.S., 1882.

(North outline.)—The surface along this line is rolling or undulating prairie with a soil of heavy clay loam which ranks as first-class. It is excellent wheat land.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is level or undulating prairie with a heavy clay loam soil ranking as first-class. Moosejaw creek, which flows through section 12 in a northwesterly direction, crosses this line. Along the northern half of this outline there are a number of hay marshes. The soil is well suited for wheat growing and general farming purposes.—P. R. A. Belanger, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating prairie nearly level and ranks as first-class. It is farming land best adapted for wheat growing. It is watered by Moosejaw creek. There are some small hay marshes, and a few patches of shrubbery, suitable only for fuel, are to be met with along the banks of the creek. The water in the creek is fresh and good.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—The surface along these lines is gently rolling 13. prairie with a few marshes. The soil is a good clay loam over a white clay subsoil. The land falls south and drains into Moosejaw creek. An old trail crosses the outline diagonally. The land is good and well adapted for wheat cultivation.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The land in this township is rolling and undulating prairie with a clay loam soil generally, and is good wheat land. Water can be procured in some of the marshes.—E. Fafard, D.L.S., 1882.

(North and east outlines.)—The surface along these lines is gently rolling 14. prairie with an alluvial soil of clay loam over a subsoil of white clay. It ranks as first-class, and would be well adapted for wheat growing. A cart trail crosses the southeast corner of the township. There is very little surface water except in a large marsh which was crossed in section 13.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—This township is all open prairie. Some large marshes are to be met with in the interior, but the soil generally is of first-class quality and well suited for agriculture.—F. E. Brunelle, D.L.S., 1882.

(North outline.)—The surface along this line is slightly undulating prairie with a soil rated as first-class. Large marshes occur in sections 31 and 32.—C. Desjardins, D.L.S., 1882.

(East outline.)—The surface along this line is gently rolling prairie with a clay loam soil over a subsoil of white clay. The only marsh of any considerable size is in the southeast corner of the township. The water met with was fresh and good.—A. F. Cotton, D.L.S., 1882.

(South outline.)—The surface along this line is gently rolling prairie with a clay loam soil over a subsoil of white clay. There is a marsh in the southeast corner. All the water met with was fresh and good.—A. F. Cotton, D.L.S., 1882.

Range 20—Concluded.

(Subdivision.)—The land in this township is level prairie of first-class quality with an alluvial soil of from nine to twelve inches in depth. A few hay marshes were met with.—F. E. Brunelle, D.L.S., 1882.

(East outline.)—The surface along this line is gently rolling prairie with a clay loam soil over a subsoil of white clay. It ranks as first-class. Water is scarce.—A. F. Cotton, D.L.S., 1882.

(Subdivision.)—The surface in this township is fine, level, farming land with a very fine hay meadow in the northwest corner. The alluvial soil has an average depth of three inches, with a heavy blue clay subsoil. There is very little water.—J. J. Francis, D.L.S., 1882.

RANGE 21.

- This township is most readily reached from Weyburn by taking what is known as the French trail to a country store in township 5, range 19, thence a trail 1. to the northeast corner of the township. This trail is a good one as far as the store but beyond there it is little travelled, rather hard to follow and in the spring is practically impassable. The soil is a clay loam with a hard clay subsoil and some gravel in places and might be suitable for agricultural purposes, other things being favourable. Sections 1 to 9, 17 to 20, 30 and 31 are very broken. The remainder of the township may be classified as high rolling or slightly hilly. No timber grows but there is very little scrub and small poplar in some of the ravines in the west tier of sections. There is a large slough extending from section 20 to section 23 which would furnish a considerable quantity of hay when dry. No other hay sloughs of any importance were seen but some of the grass on the low lands might be rank enough to use for this purpose. Very little water is found in this township as there are no creeks and no sloughs with the exception of the large one previously mentioned in sections 20 and 23. This one did not go dry through the summer. The climate appears to be fairly dry. There are late spring and early fall frosts but none were noticed in midsummer. The winters are said to be severe but there is less snow than farther west. The only fuel in the township is coal, indications of which were seen on the west boundary. A few pieces of crystalline gypsum were also picked up. No other minerals nor stone-quarries were found. No game was seen in the township.—I. J. Steele, D.L.S., 1908.
- This township is most readily reached from Weyburn by taking what is known 2. as the French trail as far as a country store in township 5, range 19, thence a trail to the police barracks as far as township 2, range 20, and thence across This trail is a good one, except in the spring, as far as the country store. Beyond there it is little more than a track and hard to follow. The soil is a clay loam with a hard gravelly clay subsoil. There is a good growth of grass south of the lake which would seem to indicate a fairly good soil but owing to the dry climate and hilly nature of the country it is probably only suitable for grazing. This entire township may be described as hilly prairie and there is no timber or scrub whatever found within its limits. There is very little hay found in the township as there are few hay sloughs. Big Muddy lake extends right across this township from the east boundary of section 13 to the west boundary of section 31. It is quite alkaline but stock will drink it. There are a few springs along its banks which furnish about the only fresh water to be had and the supply is very limited. There are no streams, and of course no waterpowers. The climate is very dry. No summer frosts were noticed, but there were late spring and early fall frosts. The winters are reported to be severe but stock can

Range 21—Continued.

winter out without protection. There is no fuel within the township unless there are underlying seams of coal, but coal is obtainable in township 1, range 22, and township 3, range 21. An outcrop of stone was seen in sections 22 and 23 on the lake shore. It appeared to be a rather shaly sandstone and rather soft, and would not be very suitable for building purposes. No minerals were noticed. A few antelopes, ducks, geese and pelicans were seen in this township. Numerous pieces of petrified wood were found along the shore of the lake.—I. J. Steele, D.L.S., 1908.

- This township is most readily reached from Weyburn by taking what is known as the "Gap" trail as far as township 6, thence turning south on one 3. of the wood trails that reach down into this township. This trail is a good one except in the spring. The soil is a clay loam with hard clay subsoil. There is considerable gravel and stone in places. The soil might be suitable for crop raising but the entire township with the exception of a few sections is much too hilly. No timber grows in this township. A very little scrub ash and willow is found in some of the ravines but most of it has already been taken by the settlers to the north. Hay is rather scarce in this township as there are very few hay sloughs. A bay of Big Muddy lake extends into sections 5 and 6. The water is rather alkaline but stock will drink it. A number of springs in sections 6 and 7 give a good flow of fresh water. There is also a fresh water lake in section 24 and some marshes in a large coulée running through the township. There are no streams and of course no water-powers. The climate is very dry. No summer frosts were noticed but there were late spring and early fall frosts. The winters are reported to be severe but stock can winter out without protection. A lignite seam has been opened up in section 17 and furnishes fuel for all the settlers within reach. Numerous outcrops of limestone were noticed along the sides of the main coulée running from section 36 to section 5. It appeared to be a good quality of building stone. No minerals were noticed. A few antelopes and ducks were seen in this township.—I. J. Steele, D.L.S., 1908.
- This township is most readily reached from Weyburn by what is known as 4. the "Gap" trail as far as township 6, range 20, and thence going across country. This trail is a good one except in the spring. The soil is a clay loam with a clay subsoil with considerable gravel in places. The soil might be suitable for crop raising but the entire township with the exception of a few quarter sections is much too hilly. No timber nor scrub of any kind grows in the township. Hay is plentiful and of fair quality as there are numerous hay sloughs scattered throughout the township but more particularly in the central part. The sloughs together with a small lake in section 34 form the only supply of fresh water. The large lake in the easterly part of the township is much too salty to be of any use. There are no streams and consequently no water-powers. The climate was very dry. No summer frosts were seen but there were numerous late spring and early fall frosts. The winters are reported to be severe but stock can winter out without protection. There is no fuel whatever in this township unless there are underlying seams of lignite. Lignite is available in township 3. No stone-quarries nor minerals were noticed. A few antelopes and ducks were seen.—I. J. Steele, D.L.S., 1908.
- (East outline.)—This line runs through rolling prairie which has some stones scattered about and cactus growing here and there. The soil is of first-class and second-class quality, consisting of a clay loam with a clay subsoil. Some marshes were crossed and a creek, flowing through a small valley, was seen in section 1. This locality has good agricultural land and is well adapted to wheat cultivation.—J. McLatchie, D.L.S., 1881.

RANGE 21—Continued.

(Subdivision.)—This township was reached from the old patrol trail to Willow-bunch, by my trail in a southwest direction across township 6, ranges 19 and 20 which afforded easy access. The soil is a sandy loam over a clay and sandy subsoil and in the easterly part of the township is suited to farming. The westerly portion, however, is too rolling for cultivation, but is good grazing land. The surface is everywhere prairie. No timber occurs. Hay is plentiful in the numerous small hay marshes and is marsh grass and redtop of good quality. Fresh water is abundant in the sloughs and marshes but no lakes occur, however, and at the end of a dry summer it would probably be scarce. There are no streams nor water-powers. No fuel occurs and fuel for the purposes of the camp was obtained from dealers in Yellowgrass. No stone-quarries occur and no economic minerals were found. The game is ducks, geese and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(East outline)—Several marshes were crossed by this boundary and some stones and cactus were found scattered about. The soil is of first-class and second-class quality, consisting of a clay loam with a clay subsoil. This locality should prove good farming country as the surface is rolling and is well adapted to wheat cultivation.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—This township is reached by the old patrol trail to Willowbunch which crosses the northwest corner. The soil is chiefly a sandy loam over clay and sandy subsoil. The land is everywhere very rolling so that it is unsuited for farming but is excellent grazing land. No timber occurs. Hay is plentiful in the numerous hay marshes which occur in the low ground and is redtop and marsh grass of good quality. Fresh water is found in the numerous sloughs and hay marshes and was abundant at the time of the survey. It would, however, be scarce at the end of a dry summer. No streams occur. No fuel occurs. Fuel for camp purposes was teamed in from Yellowgrass. The climate is moderate with no frosts at the time of the survey. No stone-quarries occur and no economic minerals were found. The only game is ducks, geese and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(East outline.)—Along this line the country is hilly prairie. The hills range from 30 to 150 feet above the valley in which there are marshes and ponds scattered about.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—The township was reached from township 8, range 21, by travelling south over the prairie, a good trail being readily found. The soil varies from black loam to gravel, there being a great variety often within narrow limits. The hilltops are rarely good soil while the hollows are often of rich bottom land. The township is best adapted to grazing, there being a good growth of grass everywhere. A strip of level prairie a mile wide adjoining the south boundary should prove, however, excellent farm land. The surface is generally rough rolling prairie. A range of low hills (the highest being 105 feet) crosses the township from east to west, about midway between the north and south boundaries. No timber occurs. Hay is abundant throughout the township, small hay marshes being very numerous in the low parts. They are at present partially filled with water. No large hay marshes occur. The hay is marsh grass and redtop. Water is plentiful in the hay marshes and sloughs in the low lands and is everywhere fresh. The land is not liable to flooding to any extent. No streams occur. The climate is moderate and no frosts occured at the time of the survey. No fuel occurs in the township and no coal was found. Coal for camp was teamed from Yellowgrass. No stone-quarries nor economic minerals occur. The only game is geese, ducks and antelopes. The township is crossed near the south boundary by the old police patrol trail (between Weyburn and Willowbunch). trail is in good condition and is still travelled.—J. L. R. Parsons, D.L.S., 1905.

Range 21—Continued.

(North outline.)—This line runs over the summit of the Missouri coteau. The country is rough and broken and has some ponds scattered about in the depressions.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township was reached from township 8, range 20, by continuing along the old Wood Mountain trail which, however, we traced with difficulty in some places. It continues its general westerly direction and provides a good dry route with easy grades. It joins the present trail from Yellowgrass to Willowbunch near the southwest corner of section 16. The soil varies from a sandy loam on a clay subsoil to a sandy loam on a sandy subsoil and has been rated as first-class and secondclass. It supports a thick growth of grass and is suitable for all classes of farming. The surface is rolling prairie. In the north along the third base line the surface is hilly, the hills ranging from thirty to forty feet, but these all break off within a mile to the south and give place to rolling country. No timber occurs in the township. Hay occurs in the numerous sloughs which occupy the low ground between the rises, and is plentiful throughout the township. One large hay marsh containing about seventy-five acres was crossed by the east boundary of section 20. The hay is marsh grass and redtop. The water in the marshes is all fresh and was abundant at the time of the survey. Toward the end of a dry summer it might be searce, but could doubtless be obtained at any time by digging a few feet. No streams occur. The land is not liable to flooding. The climate is moderate and not liable to summer frosts. No frosts occurred at the time of the survey, toward the end of May. No wood nor coal occurs in the township. Firewood for the camp was obtained from township 9, range 20. No stone-quarries nor economic minerals occur. The only game is geese, ducks and antelopes.—J. L. R. Parsons, D.L.S., 1905.

(East outline.)—The surface along this outline is, in the Coteau, hilly prairie, the soil and vegetation are much better than in the townships further to the east, and surface water is more abundant. This land is too hilly for farming but excellent for pasturage as there is plenty of fresh water. There is a little wood in some of the coulées.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—The southwest half of this township lies in the Dirt hills, part of a broken range forming the Grand Coteau du Missouri. This range runs southeast and northwest and is very broken in the centre, rising abruptly in broken ridges to an elevation of about 300 feet above the plain. A few of the ravines are timbered with small ash, elm, poplar and maple, but it is only fit for fuel. Blueberries, raspberries and black currents are plentiful. It appears to have been a favourite resort for buffalo as bones are scattered about in immense quantities. This part of the township is all broken by small, sharp, round hills. The soil is a shallow, sandy or clay loam, and much of it a hard, gravelly clay surface with a clay subsoil and ranks as second-class and third-class. The hills are generally stony and gravelly, and stones occur around the ponds. In the hollows the soil is deeper and richer and vegetation better. There are numerous swamps and ponds, four feet deep and over, containing an abundant supply of very fair water. The hay supply is small there being only a narrow margin around many of the swamps. The northeast part is level or rolling with a sandy and clay loam soil over a clay subsoil and ranks as second-class. The vegetation is scarce and there is no water at the foot of the mountain, but large numbers of ponds and swamps are found on its brow.—T. B. Gilliland, D.L.S., 1883.

(North outline.)—The surface along this line is comparatively level with a sandy loam soil over a clay subsoil. A branch of Moosejaw creek traverses the township.—J. J. McArthur, D.L.S., 1882.

Townships West of the Second Meridian.

Range 21—Continued.

(East outline.)—The surface along this line and in the Coteau, is hilly prairie with a soil of fair or medium quality. Vegetation is better and more abundant than further east.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—The land in this township is level on the south and rolling and broken slightly by small ravines on the north side. The soil in the south is sandy loam and in the north a hard grey clay over a hard clay subsoil and is rated as second-and third-class. A creek crosses the township northwesterly and southeasterly. It was not a running stream in August but it contained short stretches of fairly good water here and there. There is very little hay along the creek.—T. B. Gilliland, D.L.S., 1883.

(North outline.)—A range of hills of white clay traverses the northeast part.

11. In these hills the comparatively recent action of water has cut deep ravines and gullies, the sides of the beds of which are altogether devoid of vegetation. The soil is a sandy loam over a clay subsoil. A branch of Moosejaw creek crosses section 36.—J. J. McArthur, D.L.S., 1883.

(East outline.)—Along this line going south, the first two miles are rolling with a heavy clay soil which ranks as first-class and is best adapted for wheat growing. Continuing south the land becomes rough, broken and stony, merging into hilly prairie, with gravelly ridges, deep ravines and heavy clay soil with stones. It ranks as second- and third-class.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is rolling, hilly and broken, abutting on the Missouri coteau. The soil is a heavy clay with gravel and stone, and is watered by a creek of fresh water which crosses it from west to east. Where the surface is not broken by ravines it is excellent wheat and farming land, and throughout the township ranks as first-class for pasturage.—E. Fafard, D.L.S.,-1882.

(North outline.)—The surface along this line is level or undulating prairie **12.** with a heavy clay or sandy loam soil. The line is crossed by three creeks all flowing north in sections 31, 33 and 34, respectively. A cart trail is crossed in section 32.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is level prairie with a heavy clay soil which will make good farming land, best adapted for the production of wheat. A creek with a slow current and containing good water, crosses section 25.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The northern and central parts of this township are rolling and undulating prairie with a heavy clay soil of first-class quality for wheat growing. Towards the south the surface is stony and broken by ravines, but affords good pasturage. There are several small creeks affording a good supply of fresh water.—
E. Fafard, D.L.S., 1882.

(North outline.)—The surface along this line is rolling and undulating prairie, becoming hilly in places. The soil ranks as first-class and third-class.—H. B. Proudfoot, D.L.S., 1882.

(East outline.)—The surface along this line is undulating prairie with a hard clay soil. It is good wheat land. There are occasional swamps.—A. C. Webb, D.L.S., 1881.

Townships West of the Second Meridian.

RANGE 21—Concluded.

(Subdivision.)—The land in this township is level prairie with a heavy clay soil which ranks as first-class throughout. Moosejaw creek crosses the southwest corner of the township in a northwesterly direction. It is partly dry in summer.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is level prairie with a heavy clay soil which ranks as first-class. There is very little water.—L. Bolton, D.L.S., 1882.

(East outline.)—The surface along this line is undulating prairie with occasional swamps. The soil is hard clay best adapted for the growing of wheat.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is chiefly rolling prairie with a soil twelve to fifteen inches deep over a black clay subsoil. It ranks as first-class. Water can be obtained anywhere by sinking wells in the dry swamps.—F. Vincent, D.L.S., 1882.

(North outline.)—The surface along this line is very level with a very heavy clay soil. The vegetation is short owing to the hardness of the soil. The land ranks as first-class throughout and is generally fair farming land. There is very little meadow.—L. Bolton, D.L.S., 1882.

(East outline.)—The surface along this line is very hummocky, undulating prairie with a heavy clay soil which ranks as first-class throughout. There are several medium-sized marshes and the land is very suitable for grain growing.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is first-class for agricultural purposes or grazing. The soil is a clay loam over a good black clay subsoil, and ranks as first-class. Water can be obtained anywhere by digging a few feet, and from the small marshes scattered throughout the township.—F. Vincent, D.L.S., 1882.

(North outline.)—The surface along this line is very level with a heavy clay soil and ranks as first-class. There are a few sloughs and very little meadow land. Vegetation is very short.—L. Bolton, D.L.S., 1882.

(East outline.)—The surface along this line is very hummocky, undulating prairie with a very heavy clay soil which ranks as first-class throughout. The land is best adapted for grain growing.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is slightly undulating prairie with a clay loam soil six inches deep over a clay subsoil and ranks as first-class throughout. There is a large hay marsh in sections 2 and 3, but very little water.—J. L. Reid, D.L.S., 1883.

This township is reached by way of the small town of Grand Coulee, situated two and a half miles to the north on the main line of the Canadian Pacific railway. The soil is a black loam over a clay subsoil, and is well suited for the growing of wheat, flax and oats. The land is mostly level with no timber or scrub of any kind. Little or no hay can be cut. Plenty of good water can be obtained from wells all over the township. The climate is suitable for the early maturing of crops, and summer frosts are rare. Coal is the only fuel used. No lignite veins nor stone-quarries were noticed. A few ducks and prairie-chickens were the only game seen.—

C. Rinfret, D.L.S., 1911.

RANGE 22.

- This township is most readily reached from Weyburn by taking what is known as the French trail to a small country store in township 5, range 19, thence a trail which passes around the east end of Big Muddy lake to the police barracks. This trail is a good one as far as the store, but beyond there is little travelled and hard to follow and in the spring is practically impassable. The soil is a clay loam with a hard clay subsoil and might be suitable for agricultural purposes if the ground were not so rough. In the Big Muddy valley there is too much alkali to permit of cropping. A rancher had a small field of oats in section 3, but they did not seem to be growing well. This entire township is very much broken up by deep ravines running into the Big Muddy valley which render it unfit for anything but ranching. There is no timber but a few clumps of small poplar and scrub grow in the ravines. There are no hay sloughs in this township, but hay of excellent quality grows in most parts of the Bug Muddy valley, so that the possible yearly cut would be a good many hundred tons. Springs furnish about the only water in the township. The best one is at the police barracks, but another good one was seen in section 24. There are numerous other smaller ones in the township, some of which are salty. There are, of course, no water-powers. The climate appeared to be very dry. There are late spring and early fall frosts, but none were noticed in midsummer. The winters are said to be severe, but less snow falls than a little farther west. In the fall there were several inches of snow on the uplands when there was none in the valley. For fuel there is an abundance of coal in the township and also a little scrub. Indications of coal were seen in a great many places and a pit has been opened in section 16. It is a lignite of fair quality but disintegrates rather rapidly when exposed to the weather. A few pieces of crystalline gypsum were picked up but no other minerals nor stone-quarries were seen. No game was seen in the township.—I. J. Steele, D.L.S., 1908.
- This township may be reached from Weyburn by taking what is known as the French trail as far as a country store in township 5, range 19, thence a trail to the police barracks as far as the east boundary of township 1, range 22, and thence going across country. This trail is a good one as far as the store except in the spring. Beyond that the trail is little more than a track and difficult to follow. The part of the township north of Big Muddy lake is probably best reached by taking the "Gap" trail from Weyburn to within a few miles of Livingstone's ranch, thence going across country. The soil is a clay loam with a hard clay subsoil. A few quarter sections north of the lake might be suitable for crop raising, but are rather hilly. On the south side of the lake this township is extremely hilly and entirely unfit for anything but grazing. There is no timber of any size but considerable poplar and willow scrub grows on the north hillsides south of the lake. None is found north of the lake. Hay is not very plentiful, but some grows in the Big Muddy valley in sections 2 and There is a good growth of grass in many of the ravines, but it could hardly be utilized for hay. The water in Big Muddy lake is alkaline, but range stock will drink it. The only fresh water obtainable comes from a few springs in the ravines along the shores of Big Muddy lake. There is quite a flow from a spring in section 18, but the rest are all very small. A few sloughs north of the lake supplement the supply a little. There are no streams and consequently no water-powers. The climate is very dry. No summer frosts were noticed, but there are late spring and early fall frosts. The winters are reported to be severe, but stock can winter out without protection. There is a small quantity of scrub in the ravines south of the lake which may be used for fuel, but the supply is very limited. Indications of lignite were seen, but no seams have been opened. Lignite is obtainable in township 1.

Range 22—Continued.

stone-quarries nor minerals were noticed. No game was seen in this township. All this township north of Big Muddy lake is included in Livingstone's range.—I. J. Steele, D.L.S., 1908.

- This township is most readily reached from Weyburn by taking what is known as the "Gap" trail to the "Gap" settlement, thence one of the wood trails into township 3, range 21, thence across country. The soil is a clay loam with a clay subsoil and is suitable for crop raising wherever the ground is level enough to be worked. The township as a whole is hilly and the southwesterly part is very much broken by ravines running into Big Muddy lake. A very little scrub grows in some of these ravines but there is no timber in the township. This scrub is the only fuel in the township, unless there are underlying seams of coal, but coal is available in the township to the east and in township 5, range 23. Hay is very limited in quantity as there are only a very few hay sloughs scattered over the township. These sloughs furnish the only supply of fresh water and are all liable to dry up in a very dry season. Big Muddy lake reaches into sections 5, 6, 7 and 18, but it is rather alkaline. There are no streams and of course no water-powers. The climate is rather dry. No summer frosts were noticed but there are late spring and early fall frosts. The winters are reported to be quite severe but stock can winter out without protection. No stone-quarries nor minerals were seen. A few antelopes and ducks were seen in the township.—About half of this township is fenced off for grazing purposes.—I. J. Steele. D.L.S., 1908.
- This township is most readily reached from Weyburn by taking what is known as the "Gap" trail as far as the "Gap" settlement, thence one of the wood trails into township 4, range 21, thence across country. The soil is a clay loam with a clay subsoil and is suitable for crop raising wherever the ground is level enough. The township as a whole is hilly especially in the easterly part. There is no timber nor scrub in this township. Hay is plentiful as there are a great number of sloughs although very few of them are large. These sloughs furnish the only supply of water and most of them are liable to dry up in a dry season. There are no streams and of course no water-powers. The climate is dry. No summer frosts were noticed, but there are late spring and early fall frosts. The winters are reported to be quite severe, but stock can winter out without protection. There is no fuel within the township unless there are underlying seams of coal. Coal is available in township 5, range 23, and in township 3, range 21. No stone-quarries nor minerals were seen. A few antelopes and ducks were noticed in this township.—I. J. Steele, D.L.S., 1908.
- This township was reached by the trail which runs from Milestone to Big Muddy creek. It runs southerly through sections 32, 29, 19, 18, 7 and 6 and was in good condition. The soil varies from black loam on clay subsoil to sandy loam on gravel subsoil and owing to the character of the surface is only suitable for grazing. The surface is rolling in the northern and central parts and hilly in the south and is everywhere prairie. No timber occurs. Hay is plentiful in the numerous hay marshes which occupy the low ground. It is marsh grass and redtop of good quality. Four lakes (alkaline) occur, but good fresh water is abundant in the sloughs and hay marshes; no streams occur. The land is not liable to flooding. The climate is moderate, but at the time of survey was subject to occasional summer frosts. No fuel was found in the township; but coal for camp purposes was obtained on the east shore of Coal Mine lake in section 3, township 5, range 23. No stone-quarries nor minerals were found. The only game is antelopes, geese and ducks.—

 J. L. R. Parsons, D.L.S., 1905.

Range 22—Continued.

- to Willowbunch, which runs westerly through the northern part of the township; or by the trail from Milestone to Big Muddy creek which crosses it from northeast to southwest. These trails cross just north of a prominent hill called the "Big butte," where there are several springs and a well-known camping ground for travellers. The soil is a black loam over clay subsoil in the valleys and sandy loam over gravel or sand on the hilltops and is best suited for grazing purposes. The surface is chiefly rolling and hilly prairie. Some level land occurs along the Willowbunch trail which is good farming land. No timber occurs. Hay is abundant in the numerous hay marshes, which occupy the hollows between the hills. It is marsh grass and redtop of good quality. Fresh water is everywhere to be found in the hay marshes and sloughs. Several springs pour a continual stream of water out of the "Big butte" forming a permanent supply. The land is not liable to flooding. No water-powers occur. The climate is moderate and no frosts were noticed at the time of the survey. No fuel, stone-quarries nor minerals occur. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
- This township is crossed in its southeast part by the trail from Milestone to Willowbunch and the Big Muddy creek. This trail crosses sections 13, 12, 11 and 2, and is in good condition. The soil in the northern two-thirds is chiefly black loam to a depth of three or four inches over clay subsoil. It is gently rolling and is good farm land. In the southerly third, however, the soil is of lighter quality and the surface hilly so that it is only suited to grazing purposes. The surface is everywhere prairie. No timber occurs. Hay is plentiful in the numerous hay marshes, especially in the south part and is chiefly marsh grass and redtop of good quality. Fresh water is plentiful in the numerous hay marshes and sloughs and the supply is permanent. Weicker lake in section 3, occupying about one hundred acres, contains fresh water. No streams occur. The climate is warm and pleasant. No frosts occurred at the time of survey. No fuel occurs. Coal and wood for camp purposes were obtained at Yellowgrass. No stone-quarries nor economic minerals were found. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
- (North outline.)—This district is too hilly for farming but should prove excellent for stock raising as there is a fair soil, very good pasturage and an abundance of good, fresh water. The elevations are somewhat gravelly.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—The township was reached from the intersection of the Willow-bunch trail with the north boundary of tp. 7-21-2, by travelling west along the north boundary of township 7, ranges 21 and 22, and this afforded a good route. The soil in the north part is a sandy loam on sandy subsoil and is rather light. In the south part it is a black loam on clay subsoil and is excellent farming land. The surface is rolling in the north part of the township and gently rolling or level in the south part and is everywhere prairie. No timber occurs. Hay occurs plentifully in the numerous hay marshes throughout the township. A marsh containing about fifty acres occurs in the northwest part of section 7. The hay is marsh grass and redtop of good quality. Water is plentiful in the numerous sloughs and hay marshes and in the small lakes in sections 33 and 35 and is in all cases fresh. No streams occur. The climate is moderate with frequent showers. No summer frosts occurred at the time of the survey. No fuel occurs. No stone-quarries nor economic minerals were found. The only game seen was wild ducks and antelopes.—J. L. R. Parsons, D.L.S., 1905.

Range 22—Continued.

(North and east outlines.)—The surface along these lines is high and broken and dotted with marshes and small lakes. The soil in the small valleys is of a very rich quality and is suited for grazing purposes only.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—This township is entirely in the Dirt hills. There is no regular range, but small, round, broken hills make it unfit for cultivation. On the hills the soil is a gravelly clay, and in the hollows it is a sandy loam mixed with gravel and ranks as third-class. There are numerous hay marshes and ponds containing good water. A fair growth of grass is found in the valleys in ordinary seasons but it was rather light on account of extreme dry weather and frost. In all probability the township would be well adapted for grazing purposes.—T. B. Gilliland, D.L.S., 1883.

(North and east outlines.)—The northeast half of the township is comparatively level with a gradual rise towards the hills. The soil is a sandy loam of from six to nine inches in depth over a clay subsoil.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—About half of this township lies in the Dirt hills, which are high and broken. It is suitable for grazing only. The remainder is quite level prairie with a few small ravines towards the northeast corner. The soil is principally a shallow, sandy or clay loam, mixed with gravel and a few stones on the hills, with a hard clay subsoil throughout. It ranks as second-class and third-class. There are very few swamps or ponds, except among the hills, and the water is good. Vegetation is rather light owing to the dry season and frequent frosts.—T. B. Gilliland, D.L.S., 1883.

(North and east outlines.)—The soil along these lines is a sandy loam of moderate depth over a clay subsoil. This township is traversed almost diagonally by a branch of Moosejaw creek, the banks of which are thinly wooded. The land slopes towards the creek from either side.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—This township is rolling and cut up by ravines, except in the eastern tier of sections where the land is nearly level and the soil excellent. Although the soil is generally a little light this township is well adapted for settlement. A fine creek of clear, fresh water, from ten to fifteen links in width, and from two to five feet in depth, flows through a deep valley some thirty or forty chains in width. The banks on the north side are very high. Clumps of small ash and brush, suitable for fuel only, occur along the creek at various places throughout the township.—

S. L. Brabazon, D.L.S., 1882.

(North outline.)—The surface along this line is level or undulating prairie with a soil of heavy clay or sandy loam and is good farming land. A branch of Moosejaw creek, flowing north, is crossed in the eastern half of section 31. Its shores are covered with brush.—A. C. Webb, D.L.S., 1881.

(East outline.)—A range of clay hills, with deep ravines, traverses the township almost diagonally. In the northeast part the alluvial deposit is small and the vegetation scant.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—The surface along this township is rolling and undulating prairie with a first-class soil over a heavy clay subsoil. It is all good farming land. A branch of Moosejaw creek, which crosses the western part, contains good water. There is wood fit for fuel only in the valley of the creek. A good cart trail to Qu'Appelle crosses the township from south to northeast.—E. Fafard, D.L.S., 1882.

Range 22—Continued.

(North outline.)—Moosejaw creek crosses this line near the centre of the township, flowing in a northwesterly direction. The country adjoining the creek, to the south is low lying, with a great deal of water on the surface. There is first-class hay on these wet flats, but on the dry portions cactus and sage brush grow abundantly. The land ranks as third-class. North of the creek it is undulating and rolling prairie, becoming hilly in places.—H. B. Proudfoot, D.L.S., 1882.

(East outline.)—The surface along this line is low, level prairie, with a very thin growth of grass, but producing cactus and sage in abundance. The subsoil is clay and white clay ranking as third-class and fourth-class. Mooseiaw creek which is from fifteen to twenty links wide and three to five feet deep, crosses this outline. Its banks are from six to fifteen feet high but very muddy. It crosses section 13 twice and section 24 five times.—H. B. Proudfoot, D.L.S., 1882.

(Subdivision.)—This township is level and gently rolling prairie, with a little sand and all heavy clay subsoil ranking as first-class except in some places. The southwest branch of Moosejaw creek crosses, in a northerly direction, between the fifth and sixth tiers of sections. There is some wood along the creek, composed of ash, cherry, poplar and willow, all of small dimensions, and good only for fuel and fences. The east branch of Moosejaw creek runs across the northwest quarter of the township. The land is good for farming purposes.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is level prairie. The north
14. west half of section 31 is in the valley of the Moosejaw. The soil is a heavy clay and ranks as first-class. A coulée, seventeen chains wide, crosses the northeast half of section 31. A deep slough was crossed in section 36. Water is scarce.—L. Bolton, D.L.S., 1882.

(East outline.)—The surface along this line is rolling prairie with several scattered marshes and low lands. The soil is a clay loam with a dark clay subsoil and ranks as second- and third-class. A dry watercourse crosses the line four times in the southeast half of section 1. The land is fair for farming purposes.—H. B. Proudfoot, D.L.S., 1882.

(Subdivision.)—The surface in this township is level prairie traversed diagonally by Moosejaw creek, in a northwesterly direction. The creek is here from a chain to a chain and a half wide. The soil is a clay loam from twelve to sixteen inches deep with a very rich black clay subsoil. This land ranks as first-class.—F. Vincent, D.L.S., 1882.

(North, east and south outlines.)—The surface along these lines is very level, with a heavy clay soil and ranks as first-class. There are a few sloughs and very little meadow land. Vegetation is short owing to the hardness of the clay soil.—L. Bolton, D.L.S., 1882.

(Subdivision.)—The land in this township is level prairie, part undulating. Water can be obtained everywhere. The soil is twelve to fourteen inches deep over a black clay subsoil and is rated as first-class land.—F. Vincent, D.L.S., 1882.

(North outline.)—The surface along this line is undulating prairie, very **16.** hummocky. The soil is a heavy clay and ranks as first-class. A ravine, with a dry creek, passes through the northeast half of section 36. The land is good for grain growing.—W. Pearce, D.L.S., 1881.

RANGE 22—Concluded.

(*East outline*.)—The surface along this line is level with a very heavy clay soil. It ranks as first-class throughout. There are a few sloughs. There is very little meadow land, and the vegetation is short owing to the hardness of the clay soil and dryness of the season.—*L. Bolton*, *D.L.S.*, 1882.

(Subdivision.)—The surface of this township is slightly undulating with a clay loam soil over a clay subsoil. The land ranks as first-class throughout. There are very few marshes.—J. L. Reid, D.L.S., 1883.

RANGE 23.

(South outline.)—This township may be reached from Weyburn by taking that is known as the French trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to the Big Muddy barracks and thence the Willowbunch police trail westerly; it may also be reached from Moose-jaw by taking the Willowbunch trail to Willowbunch thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate, might be better adapted to ranching. There are very few sloughs in this township. No timber or scrub whatever is found, but there are indications of coal suitable for fuel. The climate is very dry, particularly in the summer, and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

(Subdivision.)—This township is most readily reached from Weyburn, the nearest railway point, by taking any one of the numerous roads to what is known as the "Gap settlement" in the vicinity of township 6, range 19, thence the trail to the Big Muddy police barracks, which passes through the northeasterly part of the township via Livingstone's ranch. This trail is a good one except in the early spring. The soil is mostly a clay loam with a clay subsoil, but in some places there is considerable gravel. No timber whatever grows in the locality, but a small quantity of poplar and willow scrub grows in some of the ravines in the southerly and easterly parts of the township. This scrub is not worth considering for fuel, but there is considerable wood available for this purpose in township 2, range 22. A lignite seam has been opened up in township 1, range 22, and in all probability lignite also underlies this township. surface is very much cut up by rolling hills and deep ravines, so that there are very few quarter sections suitable for anything but grazing. Sheep would probably not do as well as cattle or horses owing to the quantity of spear grass which grows here, but if carefully herded off it for a month or six weeks when it is most dangerous, it is possible that they might be raised successfully. Very little hay could be cut as sloughs are rare and the upland grass does not grow long enough. A small stream of fairly fresh water flows across the southwest corner of the township, which seldom if ever goes dry. The only other water found was in a few scattered sloughs. There are, of course, no water-powers. The climate is generally supposed to be dry, but this season during June and July there were numerous electrical storms, frequently accompanied by high winds. Hail also fell at times which would have been disastrous to crops had there been any in the locality. No frost occurred between May 24 and August 27. A few outcrops of shale were seen, but no stone of any economic value nor minerals were noticed. A few ducks and grouse were the only game seen.—I. J. Steele, D.L.S., 1909.

This township is most readily reached from Weyburn by taking what is known as the "Gap" trail to Livingstone's ranch, thence a trail to the police barracks which passes through this township. This trail is a good one except in the spring. The soil is a clay loam with a hard clay subsoil and considerable gravel

RANGE 23—Continued.

in places. The easterly part of the township is very much broken by deep ravines while the rest is very hilly and broken by dry valleys. With the exception of a very few quarter sections, this township is fit only for ranching. There is no timber but a little scrub was seen in some of the ravines in the easterly part of the township. Very little hay was seen in this township, a few sloughs in the northerly part being the only source of supply. Big Muddy lake extends into sections 24, 25 and 36. The water is alkaline but ranch stock will drink it. The few sloughs previously mentioned form the only other source of supply. There are no water-powers as there are no streams. The climate is very dry. No summer frosts were noticed, but there were late spring and early fall frosts. The winters are reported to be rather severe but ranch stock need no protection. There is practically no fuel within the township, unless there are underlying seams of coal, as the little scrub growing in the ravines is scarcely worth mentioning. Scrub is available in the township to the east, and coal in township 1, range 22. No stone-quarries nor minerals were seen. With the exception of a few ducks no game was noticed in this township.—I. J. Steele, D.L.S., 1908.

- This township is most readily reached from Weyburn by taking what is known as the "Gap" trail, to Livingstone's ranch, which is just on the north 3. boundary of this township. This trail is a good one except in the spring. The soil on the upland is a clay loam with a hard clay subsoil and considerable gravel in places. In the Big Muddy valley, which extends across the township, the soil is a hard gumbo in dry weather and a mire in the spring. The entire township is very hilly and broken by deep ravines which renders it entirely unfit for anything but ranching. A very little scrub is found in some of the ravines, but no timber of any size grows. Hay is not very plentiful, a few sloughs in the southwesterly part of the township being the only source of supply. In this part of the Big Muddy valley the grass is not nearly so rank as in other parts and can hardly be used as hay. Big Muddy lake extends into sections 1, 12 and 13, and there is also an alkaline lake in sections 29, 30, 31 and 32. A few springs along the south edge of the Big Muddy valley give a supply of fairly good water, and a number of sloughs on the upland did not get dry through the summer. There are, of course, no water-powers. The climate is very dry. No summer frosts were noticed, but there are late spring and early fall frosts. winters are reported to be severe, but stock can winter out without protection. Some indications of coal were seen, but no seams have been opened up. The three ranchers in the township have been able to collect enough scrub from the ravines to supply them with fuel, but the supply is very limited. No stone-quarries nor minerals were With the exception of a few ducks no game was noticed.—I. J. Steele, D.L.S., seen. 1908.
- This township was reached from township 4, range 18, by following the 2nd 4. base line westward. The soil is good, supporting a luxuriant growth of upland grass. The southern part of the township is too hilly and broken to be of use for agricultural purposes, but the northern part is good agricultural land. The surface is prairie with no timber, except a small amount of poplar scrub in the ravines in the southern part. A considerable amount of hay is found in the numerous small hay marshes throughout the township. Fresh water is everywhere to be found in the marshes and sloughs, but no water-powers occur and the land is not liable to be flooded. The climate is moderate with no summer frosts. A small amount of deadwood is found in the ravines in the southern part of the township. Coal occurs on the south shore of Coal Mine lake. It is a low grade lignite, but burns readily in an ordinary cookstove. A considerable amount has already been taken out by the settlers from the adjacent country. No stone-quarries nor minerals were found. Duck was the only game.—J. L. R. Parsons, D.L.S., 1907.

Townships West of the Second Meridian.

Range 23—Continued.

- This township was reached by Lagari's trail, which branches off from the Big Muddy Creek trail, just south of the "Big butte" in section 20, township 6, range 22. It runs in a southerly direction, from section 35 to section 1, and is in good condition. The soil is chiefly black loam and clay subsoil, with sandy loam and gravel on the high ground. The valley through which the trail runs will make excellent farming land, and the balance, being rolling and hilly, is best suited for grazing. The surface is prairie, varying from gently rolling to hilly. No timber occurs. Hay is found in the hay marshes which occur frequently in the low ground, and is marsh grass and redtop of good quality. A permanent supply of fresh water is to be found in the marshes and sloughs. Coal Mine lake, in sections 3, 4 and 9, is alkaline. No streams nor water-powers occur. The climate is moderate, but slight frosts occurred at the time of the survey. A seam of lignite was found on the east shore of Coal Mine lake on the south boundary of section 3. The seam, which is about four feet thick. outcrops just above the water line of the lake on the west face of a hill. It is of good quality, and was burned in the cooking range in the camp. It burned readily, leaving. however, a large residue of ash. No stone-quarries occur. No minerals occur, except coal. The only game is antelopes, geese and ducks.—J. L. R. Parsons, D.L.S., 1905.
- 6. Sections 12, 1 and 2 and is in good condition. The soil is chiefly black loam on a clay subsoil, with, however, gravel on the hilltops. It supports a thick growth of buffalo grass and owing to the rolling nature of the surface is best suited for grazing. The surface is everywhere prairie. It is gently rolling along the south outline but soon becomes roughly rolling and hilly toward the north. No timber occurs. Hay is abundant in the numerous hay marshes; it is chiefly marsh grass and redtop of good quality. Fresh water is readily found in the sloughs and hay marshes which occupy the low ground. No water-powers occur. The climate is moderate but slight frosts occurred at the time of the survey. No fuel occurs in the township, but lignite of good quality may be obtained in section 3, township 5, range 23. No stone-quarries nor economic minerals were found. The only game is antelopes, geese and ducks.—

 J. L. R. Parsons, D.L.S., 1905.
- The township was reached from township 8, range 22, by travelling west along the north outline, which afforded a good trail. The soil is chiefly black loam over clay subsoil, but the southern one-third is rather hilly and the soil lighter, being sandy loam over sandy subsoil, and this part is not as good farming land as is the northern part. The surface is everywhere prairie. It is rolling, with some low hills on the southern part. No timber occurs. Hay is abundant in the numerous small hay marshes and is marsh grass and redtop of good quality. Fresh water may be easily obtained in the sloughs and hay marshes. No streams occur. The climate is moderate, and no summer frosts were experienced at the time of the survey. No fuel occurs in the township, but a good seam of lignite is to be found in section 3, tp. 5-23-2. No stone-quarries nor minerals occur. The only game is antelopes, geese and ducks.—J. L. R. Parsons, D.L.S., 1905.
 - (North outline.)—This district is best adapted to grazing as it has a fair soil, an abundance of fresh water, good pasturage and is rather hilly. The elevations are gravely.—O. J. Klatz, D.T.N., 1881.

(Subdivision.)—This township was reached from township 8, range 22, travelling west along the south outline, which afforded a good trail. The soil is chiefly black loam, varying from three to eight inches over clay subsoil, and is well suited for

RANGE 23—Continued.

farming. The surface is everywhere prairie. It is level in the southern half and rolling in the northern half. No timber occurs. Fresh water is abundant in the numerous small sloughs and hay marshes. No streams occur. The climate was moderate, with no frosts at the time of the survey. No fuel occurs in the township, but a good quality of lignite may be procured in section 3, tp. 5-23-2. No stone-quarries nor minerals occur. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S, 1905.

(North outline.)—The surface along this line is rolling prairie with a few marshes. The soil is from six to eight inches deep over a clay subsoil, and ranks as second-class.—J. K. McLean, D.L.S., 1882.

(East outline.)—The surface along this line is high and undulating prairie. Several large marshes were crossed. The soil is six inches deep over a clay subsoil and ranks as second-class and third-class.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—This township is all in the Dirt hills and is very rich and broken. There is a level clay flat, from one to two miles wide, running from the northwest corner in a southeasterly and easterly direction. The soil is a shallow sandy and clay loam and also a heavy gravelly clay over a clay subsoil. On the hills it is mixed with gravel and stones. The land ranks as second-class and third-class. There are numerous swamps and ponds, most of which contain good water. Vegetation is light and in some places wild sage grows. The greater part of this township is only fit for grazing purposes. Water-fowl are abundant but other game is scarce.—T. B. Gilliland, D.L.S., 1883.

(North outline.)—The surface along this line is rolling, broken and slightly **10.** hilly prairie with a soil of from eight to ten inches over a clay subsoil. It ranks as third-class. There is a considerable number of marshes and ponds. Some of the ponds are alkaline.—J. K. McLean, D.L.S., 1882.

(East outline.)—The surface along this line is rolling to level prairie with numerous marshes. The soil is from six to eight inches in depth over a clay subsoil, and ranks as second-class and third-class.—J. J. McArthur, D.L.S., 1882.

(Subdivision.)—This township is all in the Dirt hills and is very broken and hilly except a small portion of the northeast corner which is level. The soil is principally gravelly clay, and in some places sandy and clay loams over a hard clay subsoil. There is considerable surface stone and a great number of ponds and swamps, containing generally poor water. There is but a small quantity of hay in proportion to the amount of swamp. The land ranks as second-class and third-class. Vegetation is rather light but it is evident that it would be somewhat better in favourable seasons. It is unfit for cultivation, but would be suitable for grazing. There is a great quantity of water-fowl, but other game is scarce. This has been a favorite camping ground of the Indians.—
T. B. Gilliland, D.L.S., 1883.

(North outline.)—The surface along this line is rolling prairie with a soil of 11. from twelve to fourteen inches in depth over a clay subsoil. It ranks as first-class. Section 36 ranks as second-class and third-class. A ravine, sixty feet deep, with a small creek about eight or nine feet wide, crosses sections 34 and 35, and another ravine with a rivulet crosses section 33.—J. K. McLean, D.L.S., 1882.

(East outline.)—The surface along this line is rolling and level prairie. There is a grass pond in section 1. The soil is eighteen inches deep over a clay subsoil and

Range 23—Continued.

ranks as first-class. It is good farming land. A ravine thirty feet deep with a small creek crosses section 36, and ridges from forty to fifty feet high were crossed in sections 13 and 24.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating with some broken, rolling prairie in the southwest corner. The east half is good for farming but the west half is swampy, hilly and gravelly, and suitable for grazing purposes only. The soil ranks as second-class and third-class.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is level or undulating prairie **12.** with a clay loam soil and some sandy loam. The line is crossed by a creek flowing north near the eastern limit of section 34, and by another about a mile and a half further west.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is rolling and open, or level prairie with a few grass marshes. The soil is from ten to twelve inches deep over sand, clay and gravel subsoils. Section 1 is a level alkali flat and with section 36 ranks as second-class. The remaining sections along this line rank as first-class. Ridges of from thirty to fifty feet high were crossed in sections 12, 25 and 36. The valley of a branch of Moosejaw creek with banks one hundred feet high and covered with scattered poplar and ash, occupies part of sections 13, 25 and 36. The stream in section 13 is fifteen links wide and crosses the line six times. A large grass marsh with banks of from thirty to forty feet high crosses the central portion of section 12.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—The land in this township is level and rolling prairie with a sandy and clay loam soil of first-class quality. There is some wood in the gullies suitable only for fuel.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this outline is low lying with a great deal of water. There is some first-class hay on the wet flats. The land ranks as third-class.—H. B. Proudfoot, D.L.S., 1882.

(East outline.)—The surface along this line is rolling or level prairie. There are several hay marshes and low, wet lands were crossed. The soil is a clay loam with a clay subsoil. It ranks as third-class and fourth-class.—H. B. Proudfoot, D.L.S., 1882.

(Subdivision.)—The southern part of this township is gently rolling or level prairie. The northeastern corner is heavy clay and wet land which is covered with water, from six to twelve inches in depth, during the spring season. No water was seen at the time of survey. A new trail, from Wood mountain to Regina, crosses sections 1 and 2. There is no wood in this township, but some can be had in the west part of the adjoining one along the banks of the creek. There are a few small, dry creeks in the south and northwesterly parts of this township. The soil is a heavy clay throughout and ranks as first-class.—Dumais and Michaud, D.L.S., 1882.

(North outline.)—The land along this line is dry with a clay subsoil and ranks as third-class. Moosejaw creek, which is from five to six feet in depth, crosses the line in section 35.—H. B. Proudfoot, D.L.S., 1882.

(East outline.)—The surface along this line is level prairie. Sections 1, 12, 13 and 24 are hay flats having from two to ten inches of water on the surface. The above sections have a clay subsoil which ranks as fourth-class.—H. B. Proudfoot, D.L.S., 1882.

Range 23.—Concluded.

(Subdivision.)—The land in this township is level prairie with a few swamps (all dry in September), no doubt furnishing plenty of water during spring and summer. Good fresh water was obtainable in any of the dry sloughs by digging a few feet. The soil in the south part is hard blue clay and ranks as third-class. In the north part the soil is a very rich, black loam, over a clay subsoil and ranks as first-class.—T. Vincent, D.L.S., 1882.

(North and east outlines.)—The surface along these lines is very level with **15.** a very heavy clay soil. There a few sloughs, but no streams of any account except Moosejaw creek which traverses this township. There is very little meadow land and the vegetation is short, owing to the dryness of the season. The land ranks as first-class throughout.—L. Bolton, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating prairie with a heavy clay loam soil over a clay subsoil. Moosejaw creek, in which the water is excellent, crosses the township.—J. L. Reid, D.L.S., 1883.

This township is reached by the "Soo" line of the Canadian Pacific railway, which enters the township in section 31 and leaves in section 12. The town of Drinkwater is situated in the south half of section 32. The surface is almost level, except where Moosejaw creek flows, and here the banks are very steep with low land between the many banks. There is a dam built across the stream in section 29, which deepens the water in many places to as much as fifteen or twenty feet. The soil is of excellent quality and best adapted to the growing of wheat and flax. The main source of the water supply is Moosejaw creek; it is not of very good quality. No water-power can be developed. The only fuel used is coal. No lignite veins nor stone-quarries are found. No game was seen.—C. Rinfret, D.L.S., 1911.

(North outline.)—The surface along this line is undulating prairie, very hummocky. The soil is a heavy clay ranking as first-class and is good farming land well suited for grain growing.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is very level with a very heavy clay soil. There are a few sloughs but not much meadow land. Vegetation is short but the land may be rated as first-class throughout.—L. Bolton, D.L.S., 1882.

(Subdivision.)—The land in this township is undulating prairie with a clay loam soil over a clay subsoil and ranks as first-class throughout.—J. L. Reid, D.L.S., 1883.

The main line of the Canadian Pacific railway runs just north of this township. The small town of Belle Plaine, in section 31, is the most convenient railway station. All road allowances are open and more than half of the township is under cultivation. The surface, which is level, consists of a black loam over a clay subsoil, and is excellent for grain growing. Prairie grass is used for hay, and may be cut in sections 8, 11, 22 and 27. Surface water held in ponds, which have been dug out, is the only water supply, and is liable to run out in a dry season. Coal is the only fuel used. No lignite veins nor minerals were noticed. A few prairie-chickens were the only game seen.—

C. Rinfret, D.L.S., 1911.

RANGE 24.

(East and south outlines.)—This township may be reached from Weyburn by taking what is known as the French trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to the Big Muddy barracks and thence the Willowbunch police trail westerly; it may also be

RANGE 24—Continued.

reached from Moosejaw by taking the Willowbunch trail to Willowbunch, thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate, might be better adapted to ranching. There are very few sloughs in this township. No timber nor scrub whatever is found but there are indications of coal suitable for fuel. The climate is very dry, particularly in the summer, and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

(Subdivision.)—This township is most readily reached from Weyburn, the nearest railway point, by taking any of the numerous roads to what is known as the "Gap settlement" in the vicinity of township 6, range 19, thence the trail to the Big Muddy police barracks, via Livingstone's ranch, as far as township 1, range 23, thence across country. This is a very fair trail. The soil is a clay loam with a clay subsoil, but in many places there is considerable gravel and most of the low ground is alkaline. With favourable climatic conditions the soil would probably grow crops wherever the ground is sufficiently level to be worked. The entire township, with the exception of the northwest corner and a few other small areas, is much too broken to be farmed. The country is excellent for ranching, more so for cattle and horses than for sheep owing to the quantity of spear grass growing everywhere. No timber nor scrub of any description grows in this township, but wood for fuel can be obtained in township 2, range 22. Seams of lignite probably underlie this township, as numerous indications of it were seen. A small stream of fairly fresh water enters on the north side of section 34 and leaves on the east boundary of section 12. This, with its tributaries, gives a good supply of water as it seldom if ever goes dry. It is much too small to develop any water-power. There are no sloughs worth mentioning in the township, consequently slough hay is scarce, but a small quantity might be cut on some of the creek flats. The climate is generally supposed to be dry, but this season during June and July, electrical storms followed one another in quick succession generally accompanied by high winds and frequently by hail which would have been disastrous to crops had there been any in the locality. No frost occurred between May 24 and August 27. No stone-quarries nor minerals were noticed. A few ducks and grouse were the only game seen.—I. J. Steele, D.L.S., 1909.

This township is best reached from Weyburn by taking what is known as the "Gap trail" to Livingstone's ranch, thence taking the trail in the Big Muddy 2. valley to George's ranch in section 27, township 3, thence across country. This trail is good except in the spring. The soil is a clay loam with a hard dry clay subsoil, and would be suitable for agriculture if the surface were sufficiently level. There is no timber nor scrub in this township. It is very much cut up with dry coulées which make it unfit for farming except in a few sections. There is no hay whatever. Two branches of Beaver creek pass through the township, but both were almost dry at the time of the survey (September) and no doubt are dry for most of the season. These streams are the only source of supply of water, as there are practically no sloughs in the township and no springs were seen. The climate was very dry, particularly in the summer. There are late spring and early fall frosts which would make farming a doubtful proposition, and the winters are reported to be rather severe. No stone-quarries nor minerals were seen. A small quantity of dead poplar scrub in the township to the north is available for fuel, but there is not sufficient to last any length of time. Lignite coal of an inferior quality is found in the township to the north and also in township 1, range 22, and no doubt could be found nearer at hand. No game was seen, but there are supposed to be a few antelopes in the locality.— -I. J. Steele, D.L.S., 1908.

Range 24—Continued.

- This township is most readily reached from Weyburn by taking what is known as the "Gap trail" as far as Livingstone's ranch, thence following the 3. trail in the Big Muddy valley, which passes through this township. trail is good except in the spring. On the upland the soil is a clay loam with a hard clay subsoil. In the valley the soil is what is known as gumbo. During the wet spring weather it is very soft, but dries out hard in the summer. No large timber grows in this township, but there is considerable scrub in some of the ravines which cut up most of the township and make it entirely unfit for anything but ranching. A very small quantity of hay grows around a few sloughs in the southerly part of the township, but not enough to be of much value. These sloughs, together with a few springs in the ravines, furnish the only supply of water. Most of the sloughs dry up in summer, but the springs are fairly permanent. There are no water-powers. The scrub in the ravines is available for fuel, but is limited in quantity. There are many indications of lignite in this township, but no seams were found. No stone-quarries nor minerals were seen. A few prairie-chickens were the only game seen, but there are supposed to be a few antelopes in the locality. The climate is very dry, particularly in the summer. There are late spring and early fall frosts on the uplands, but in the Big Muddy valley it seems to be warmer. At the time of survey (September) there were several inches of snowfall on the upland, but none in the valley.— I. J. Steele, D.L.S., 1908.
- 4. along the 2nd base line. The soil is of fair quality, but the country is so broken in the south part that only the north two-thirds is suited for agricultural purposes. The surface is everywhere prairie with no timber. Fresh water of good quality is readily found in the numerous sloughs and marshes. Big Muddy creek crosses the southwest corner of section 6. At this point it is twelve links wide and eighteen inches deep and, at the time of survey (June) was flowing at about one mile per hour in well defined banks. There is no likelihood of flooding. There are no water-powers. The climate is moderate with no frosts at the time of survey. A little deadwood is found along the south boundary in the ravines which lead into Big Muddy bottom. No stone-quarries nor minerals were found. The only game was ducks.—

 J. L. R. Parsons, D.L.S., 1907.
- This township was reached from Lagari's trail by travelling west along the north boundary of sections 24 and 23, which afforded a good trail. Lagari's 5. trail crosses sections 13, 12, 11 and 2. The soil varies from black loam on clay subsoil to sandy loam on sandy subsoil and occasionally gravel, but most of the township is suited to farming. The surface is everywhere prairie and is level or gently rolling throughout. No timber occurs. Hay is to be found in the hay marshes which are fairly numerous; it is chiefly redtop and marsh grass of good quality. Water is not so plentiful as in the adjoining township, but several hay marshes contained a good supply of fresh water at the time of the survey (toward the end of September), and the supply is doubtless permanent. No streams occur. The climate was dry and warm, although there were several sharp frosts at the time of the survey. No fuel was found in the township, but a good quality of lignite is to be had in sec. 3, tp. 5-23-2, from which a supply was obtained for the camp. There are no stone-quarries. No minerals were found. The only game seen was antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.

RANGE 24—Continued.

- 6. from Weyburn to Willowbunch, which is in good condition. The soil varies from black loam and clay subsoil to sandy loam and sandy subsoil with gravelly subsoil frequently. The southern two-thirds could be used for farming, but the northern one-third is only suitable for grazing. It supports a good growth of buffalo grass. No timber occurs. Hay is plentiful in the numerous hay marshes, especially in the northern part of the township. It is marsh grass and redtop of good quality. Fresh water is to be had in the numerous hay marshes and sloughs. The lake in sections 20, 21, 28, 29 and 30 is alkaline. No streams occur. The climate is moderate, but some sharp summer frosts were experienced during the time of the survey. No fuel occurs. Coal for camp purposes was obtained at section 3, township 5, range 23. No stone-quarries nor minerals were found. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
- This township is easily reached from the Willowbunch trail which crosses the northern part of township 6, range 24, and which is in good condition. The soil is a black and sandy loam on a clay subsoil chiefly, but with gravel in places. Owing to the hilly nature of the surface it is best suited for grazing. The surface is everywhere prairie and is roughly rolling or hilly throughout. No timber occurs. Fresh water is abundant in the numerous sloughs and hay marshes. No streams occur. Channel lake (alkaline) occupies the southwest corner of the township, and covers parts of sections 5, 6 and 8. No water-powers occur. The climate is moderate, but some sharp frosts and a few snow flurries were experienced during the time of the survey. No fuel occurs. Coal and wood for camp purposes were obtained at Yellowgrass. No stone-quarries nor minerals occur. The only game is antelopes, ducks and geese, and a few prairie-chickens.—J. L. R. Parsons, D.L.S., 1905.
- (North outline.)—The country along this line is rough and hilly; the summits are stony and gravelly but the depressions contain good soil, an abundance of good grass and fresh water. Generally, this should prove a good grazing country.—O. J. Klotz, D.T.S., 1881.

(Subdivison.)—This township was reached from the Willowbunch trail by travelling northward along the centre meridian of township 7, range 24. There were some heavy grades on this trail. The soil is a black loam on clay subsoil, and sandy loam on sandy subsoil, with gravel in places. It is only suited for grazing. The surface is everywhere prairie, and varies from gently rolling to roughly rolling. No timber occurs. Hay is plentiful in the numerous hay marshes and is chiefly marsh grass and redtop, of good quality. Fresh water is to be found readily in the hay marshes and sloughs and these afford a permanent supply. Four small lakes occur which are alkaline. No water-powers occur. The climate is moderate, but some sharp frosts and heavy winds were experienced during the time of the survey. No fuel occurs. Coal and wood for camp were obtained at Yellowgrass. There are no stone-quarries nor minerals. The only game seen was antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.

(North outline.)—The surface along this outline is rolling and hilly prairie.
Several grass and two alkaline ponds were crossed. The soil is from six to nine inches deep over a clay subsoil and ranks as second-class and third-class.
J. K. McLean, D.L.S., 1882.

Range 24—Continued.

(East outline.)—The surface along this line is rolling prairie with several small marshes. Two-thirds of section 25, and one-third of the northeast of section 24, are covered by a large marsh of fresh water. The soil is from six to eight inches deep over a clay subsoil and ranks as second-class.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—The land in this township is very undulating and marshy and is unsuitable for agriculture. It is, however, good for pasturage. Sections 25 and 36 are the best for farming purposes.—C. F. Leclerc, D.L.S., 1883.

(North and east outlines.)—The surface along these outlines is rolling, broken 10. and hilly prairie with numerous grass and some alkaline ponds. A large grass marsh, covered with water to a depth of about a foot and a half, is situated in section 13. The ridges are from twenty to thirty feet high. The soil is from six to ten inches deep over a clay subsoil ranking as third-class in the north, and second-class and third-class in the east.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—The land in this township is unsuitable for agricultural purposes, being very sandy, and swampy and suitable only for pasturage. The soil ranks as third-class and fourth-class.—C. F. Leclerc, D.L.S., 1883.

(North and east outlines.)—The surface along these lines is broken and hilly 11. prairie. There are some grass swamps and marshes in the north, but they are numerous in the east. The Dirt hills commence to rise to the south in section 36. In the northwest of section 31, there are a confused number of small hills with a stony surface. Some of the ridges are from twenty-five to thirty feet high. An alkali pond was crossed in section 12. The soil is from six to ten inches deep over a clay subsoil. Sections 24, 25 and 36 rank as second-class, while sections 1, 12 and 13 rank as third-class. The north ranks as second-class and third-class.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—The land in the northwest part of this township is very broken and hilly. The soil is generally sandy and gravelly, and very stony on the tops of ridges. There are numerous ponds and sloughs of good, clear water. The southeast half is rolling and undulating prairie with a sandy loam soil over a clay loam subsoil and is better adapted to grazing than farming purposes.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is level or undulating prairie with a heavy clay or loam soil. Water is scarce except in a small creek, flowing north, in section 32.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is rolling to slightly rolling prairie, the rolls ranging from twenty-five to thirty feet high. The soil is eight to twelve inches deep over a clay subsoil and ranks as second-class. Small creeks cross sections 25, 24, 13 and 12.—J. K. McLean, D.L.S., 1882.

(Subdivision.)—All the sections adjoining the north boundary contain good, level, farming land with some portions swampy. The remainder of the township lies in the Dirt hills and is rather rough. The soil throughout is a sandy loam with gravelly parts over a gravelly and clay subsoil. The township ranks as first-class for pasturage. There is some wood in the bottom of the gullies which will be good for fencing and fuel.—Dumais and Michaud, D.L.S., 1883.

Range 24—Continued.

(North outline.)—The eastern part of this line is crossed by a branch of 13. Moosejaw creek. South of the creek the country is low lying with a great deal of water on the surface. First-class hay exists in the wet flats. The land ranks as third-class.—H. B. Proudfoot, D.L.S., 1882.

(East outline.)—The surface along this line is rolling prairie with several small marshes. The soil is sandy and clay loams with clay and sand subsoils which rank as third-class. Sections 12 and 24 are crossed by dry watercourses and a small creek crosses section 23. Water is scarce.—H. B. Proudfoot, D.L.S., 1882.

(Subdivision.)—The land in this township is level or rolling prairie and is all sandy loam ranking as first-class. Water is scarce.—Dumais and Michaud, D.L.S., 1883.

(Retracement.)—This township is most easily reached by the new Canadian Northern Railway line running southeast from Moosejaw. Hearne station is close to its east boundary. This railroad enters the township in section 35, and leaves it in section 24. All the roads are opened and nearly all the land is under cultivation, the main crops being wheat and flax. In the north half of the township the soil is largely clay loam with a clay subsoil, while in the southern part there is more sandy loam, the soil consequently requiring more moisture for maturing the crops. township, agriculturally, is first-class, only slightly inferior to the one immediately north of it. The surface is generally nearly level, and in places is gently undulating, but near the northwest corner it becomes rather rolling. There are several quarter sections of open prairie where the hay is four or five inches in height, but rather sparse and light. The pasture throughout the township is poor. There are several sloughs and a coulée extending southwesterly and northeasterly, but these furnish little water and dry up during the summer. In the north part, the farms are fairly well supplied with water from wells, but in the south the supply is poor, the water from the wells being slightly coloured and containing a small percentage of alkali. The climate is hot with little rain, and light summer frosts are sometimes experienced. There is no natural fuel of any kind, coal brought from the nearest railroad station being used. A few small surface stones were seen in the southern part of the township. No minerals of any economic value were observed. A few wild ducks were seen around the sloughs and some rabbits were also noticed.—C. Rinfret, D.L.S., 1912.

(North and east outlines.)—The surface along these lines is rolling or level, dry prairie. On the north the soil is a clay loam with a clay subsoil, and ranks as third-class. Two-thirds of section 36 is low, wet land, and from here southwards along the whole of the east line there is a low, wet flat, containing water in places, of from two to ten inches in depth. A small creek crosses the southeast half of section 1. The soil eastwards is thin over a subsoil of clay and blue clay and ranks as third-class and fourth-class.—H. B. Proudfoot, D.L.S., 1882.

(Subdivision.)—The land in this township is rolling or level prairie with a clay loam soil, and ranks as first-class and second-class. There are a few creeks running through this township.—Dumais and Michaud, D.L.S., 1883.

The soil in this township is chiefly clay loam with a clay subsoil and is very well adapted to grain growing. It is thickly settled and the greater part of the land is under cultivation. Wheat and flax are the principal crops and these were in a promising condition during the time of survey (early part of June). The surface is nearly level. A few alder and willow brushes border the small watercourses. There were only a few scattered fields of hay, and pasture was rather scarce. The hay, however,

RANGE 24—Concluded.

is of good quality and reaches from twelve to fourteen inches in height. During midsummer the farmers had difficulty in procuring a sufficient supply of water. Sloughs are common but dry up, and the water at best is scarcely potable. Some cold and very good water may be obtained from deep wells. The climate is generally fine although some years the rainfall is slight. Frost occasionally does damage to the crops. The township possesses no natural fuel of any kind and no minerals. The surface is almost free from stones. Game was scarce, only a few rabbits and ducks being seen. The village of Briercrest is situated in the southeast part of section 18 on the Canadian Northern railway, which enters the township in section 18 and leaves in section 2.—C. Rinfret, D.L.S., 1912.

(North and east outlines.)—The surface along these outlines is very level with a clay soil. There is very little meadow land and the vegetation was short owing to the dryness of the season. The land ranks as first-class throughout. There are a few sloughs but no streams of any account except Moosejaw creek traverse the township.—L. Bolton, D.L.S., 1882.

(Subdivision.)—The land in this township is level or gently rolling prairie with a first-class soil. Moosejaw creek crosses the township about the centre in an easterly direction. A trail crosses in the same direction as the creek. Water is scarce, except where this creek passes, and there is no alluvial soil anywhere.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this outline is undulating prairie, very hummocky, with a heavy clay soil which ranks as first-class throughout and is good agricultural land suitable for grain growing.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this outline is very level with a very heavy clay soil. There are a few sloughs and very little meadow land. Vegetation is short owing to the hardness of the clay soil. The land ranks as first-class throughout.—L. Bolton, D.L.S., 1882.

(Subdivision.)—The land in this township is slightly undulating prairie with a clay loam soil over a clay subsoil, and ranks as first-class.—J. L. Reid, D.L.S., 1883.

There are two railroads passing through this township. The main line of the Canadian Pacific railway enters in section 30 and leaves in section 36. The Pasqua branch of the Canadian Pacific railway enters section 1 and leaves in section 18. Belle Plaine, a small town on the main line of the Canadian Pacific railway, is situated about half a mile east of section 36. Stelcam, a station on the Pasqua branch of the Canadian Pacific railway, is in section 9. All road allowances are open and mostly well beaten. This is one of the best wheat belts between Winnipeg and Calgary, the soil being six or eight inches of humus, on a clay subsoil. The country is level, very well settled and cultivated everywhere, except on some sections belonging to the Canadian Pacific Railway Company. Hay is scarce, though prairie grass which does not grow longer than ten or twelve inches can be cut in sections 18, 20, 22, 27 and 35. Water in this township is very scarce. "Dugouts" are made to hold the surface water, and in very dry seasons the farmers have to draw their water supply from Moosejaw creek, a distance of eight miles or more. The climate is good for crops in general. Occasionally summer frosts occur and at the time of survey (middle of May) the thermometer registered below freezing, but the crops were not far enough advanced to be injured. only fuel used is coal which is brought in by railroad from the west. No lignite veins and no minerals of economic value were found. Prairie-chickens were the only game seen.—C. Rinfret, D.L.S., 1911.

RANGE 25.

(South outline.)—This township may be reached from Weyburn by taking what is known as the French trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to the Big Muddy barracks, and thence the Willowbunch police trail westerly; it may also be reached from Moosejaw by taking the Willowbunch trail to Willowbunch, thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate might be better adapted to ranching. There are very few sloughs in this township. No timber nor scrub whatever is found but there are indications of coal suitable for fuel. The climate is very dry, particularly in the summer, and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

(Subdivision.)—This township is most readily reached from Weyburn, the nearest railway point, by taking any of the numerous roads to what is known as the "Gap settlement" in the vicinity of township 6, range 19, thence the trail to the Big Muddy police barracks, via Livingstone's ranch, as far as township 1, range 23, thence across country. This trail is a fairly good one. The soil is a clay loam with a clay subsoil, but in some places there is considerable gravel. It is probably suitable for grain growing and most of the township is sufficiently level to admit of this. The southeasterly corner is badly cut up by ravines, but the remainder is mostly level or rolling. There is no timber in this locality. A very little scrub grows in some of the ravines in sections 1 and 12. but it is not worth considering for fuel. Wood for this purpose may be obtained in township 3, range 25, and a lignite seam has been opened up somewhere near this township. Indications of lignite were seen, but no other minerals were noticed. A very small stream of fairly fresh water flows across this township from north to south. It is much too small for any water-power and probably goes dry in dry weather. There is no other water whatever with the exception of one or two sloughs in the westerly part of the township. Considerable hay can be cut in the flats along the creek, particularly in section 5, where there is quite a meadow. A rancher was originally located on this section, but when he found he was in Canada he moved across the boundary into the United States. The climate is generally supposed to be dry, but this season during June and July, there were numerous electrical storms accompanied by high winds and frequently by hail which would have been disastrous to crops had there been any in the locality. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. The only game seen was a few ducks.—I. J. Steele, D.L.S., 1909.

This township may best be reached from Weyburn by taking what is know as the "Gap trail" to Livingstone's ranch, thence following the trail in the Big Muddy valley to Ange's ranch, thence across country. The trail is a good one except in the spring. The soil is a clay loam with a hard white clay subsoil with considerable gravel in places, particularly in the northern part of the township. There is absolutely no timber nor scrub in this township. Most of the township is badly cut up with coulées and the northern part is very hilly. In the southern part there are a few sections which are fairly level and might be suitable for farming, but most of the township is fit only for ranching. There are no hay sloughs but there is a fairly good growth of grass in some of the coulées which might be used for this purpose A very small creek crosses the south boundary of section 5 but it is dry a little farther north and is no doubt entirely dry during most of the season. In the northern part of the township there are a few small springs which furnish a limited amount of good water. There are no water-powers and no stone-quarries nor minerals were seen. No game was seen but there are supposed to be a few antelopes in the vicinity. The climate is usually very dry, particularly in summer. There are late spring and early fall frosts, and the winters are said to be very severe.—I. J. Steele, D.L.S., 1908.

Range 25—Continued.

- This township is most readily reached from Weyburn by taking what is known as the "Gap trail" to Livingstone's ranch, thence following the trail in the Big Muddy valley which passes through this township. This trail is good except in the spring. On the upland the soil is a clay loam with a hard dry clay subsoil and considerable gravel along the south boundary. In the valley the soil is known as gumbo. During the wet spring weather it is very soft but dries out hard in the summer. No large timber grows in this township but there is considerable scrub in the ravines and on the north slope of the hills. The surface is extremely broken and a high range of hills extends across the south part of the township forming a watershed. There are very few quarter sections that are level enough for farming purposes. hay grows in this township except a little in section 14. The only available water is from a few small springs in the ravines and along the edge of the Big Muddy valley and in a small lake extending into section 7 from range 26. The supply is fairly permanent but limited. There are no water-powers. A considerable quantity of scrub in the ravines and on the north slope of the hills is available for fuel but is rapidly disappearing, as the settlers to the north secure fuel here. No coal nor lignite veins were found although there were traces of lignite in places, and no stone-quarries nor minerals were seen. No game was seen but there are supposed to be a few antelopes in the vicinity. A rancher in section 31 manages to raise some oats and potatoes but the land has to be irrigated.—I. J. Steele, D.L.S., 1908.
- This township is approached by trail from Moosejaw, seventy-two miles to the north. The soil is sandy loam with clay subsoil, and is well adapted to mixed farming. The surface is highly rolling open prairie. A lake and numerous sloughs contain good water. There is no timber of any quantity or quality, but hay of good quality is very plentiful. There is no water-power. The climate is dry and bracing and there are no summer frosts. Fuel is conveniently obtained from the bush to the west. No coal, minerals nor exposed rock were found. Prairie-chickens and ducks are fairly plentiful.—A. F. Martin, D.L.S., 1904.

This township is a good deal broken by hills and ravines, and is all open prairie. In the northwesterly part there is a large flat, chiefly alkaline, being an extension of the part of Willowbunch lake, in sections 31 and 32. There is also a large bottom or flat extending from the lake to the southerly part of the township through which Big Muddy creek runs in high water. The greater part of the soil is very hard, there being very little first-class land. Some of the land, however, could be used for ranching and also for grain growing. The general surface is very rolling, some hills being from 150 to 200 feet high. Along the ravines there is a little scrub, but no timber of any kind. There are a few nice hay meadows in the westerly part of the township from which the ranchers cut a good deal of very good hay. The water is very scarce and is chiefly alkaline. The only stream is Big Muddy creek, which in high water must be a large stream, but was dry during the time of survey. It is difficult to cross as the bottom is very soft. The climate seems to be favourable and not subject to frosts. There is no fuel, nor are there any indications of coal or lignite. There are no stone-quarries, nor any appearances of such. Game is almost unknown, as there is very little water to be found. The township on the whole is very broken and hilly, and would appear to be better adapted to ranching than to any other purpose, as hay and sheltered places for houses and stabling could easily be obtained.—J. Warren, D.L.S., 1905.

The soil is black loam and some sandy loam with clay subsoil. The surface is highly rolling, broken prairie with numerous ravines and is suitable for mixed farming. There is no timber of any quantity or quality. Hay of good quality is very plentiful. There is a large lake in this township and numerous sloughs

Range 25—Continued.

with good water. No water-power exists in the township. The climate is dry and bracing and there are no summer frosts. Fuel is obtained from the bush about twenty miles to the west. No coal, stone nor minerals were noticed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

This township is divided into three sections by Willowbunch lake, which extends nearly across the township from east to west, and which breaks up the township a good deal. This township is not easy of access as it is away from any of the leading trails except local trails. There is a good deal of hard soil in parts. Quite a number of sections are very good and would be adapted to grain growing. The surface is entirely are a few ponds of good water in the northerly part of the township. There are no streams. The climatic indications are favourable and there are no evidences of any summer frosts. Fuel is scarce, there being no timber of any size in any part of the township as the water in the lake is not suitable for use, being quite alkaline. There are a few ponds of good water in the northerly part of the township. There are no streams. The climatic indications are favourable and there are no evidences of any summer frosts. Fuel is scarce, there being no timber of any size on any part of the township. There are no indications of coal, lignite, stone-quarries nor fixed rock of any kind. Game is scarce, almost unknown, owing to the want of shelter and water. Parts of the township would be available for settlement and ranching as there is - nice pasturage and grass in some of the low lands. On the whole the northern portion is better adapted to grain growing.—J. Warren, D.L.S., 1905.

- 6. from Weyburn to Willowbunch, which is in good condition. The soil is chiefly sandy loam over clay subsoil and is well suited for farming purposes. The surface is everywhere prairie and is gently rolling or rolling throughout. No timber occurs. A limited amount of hay occurs in the hay marshes and is marsh grass of good quality. Fresh water occurs in the hay marshes and sloughs and is a permanent supply. Channel lake is alkaline. No streams occur. The climate is moderate, but heavy frosts were experienced at the time of the survey. No fuel occurs in the township. Wood for camp purposes was obtained from the settlers at Willowbunch. No stone-quarries nor minerals occur. The only game seen was ducks, geese and antelopes.—J. L. R. Parsons, D.L.S., 1905.
- This township is crossed in its southwest part by the trail from Weyburn 7. to Willowbunch, which is in good condition. The soil varies from black loam on clay subsoil to sandy loam on sandy subsoil. The southwest half of the township is rolling or gently rolling and is suitable for farming, but the northeast half is rough and hilly and only fit for grazing. The surface is everywhere prairie. Hay is plentiful in the hay marshes, and is chiefly marsh grass and redtop, of good quality. Fresh water is to be had in the hay marshes and sloughs, and was plentiful at the time of the survey. A small lake, in section 9, and Channel lake in section 1, are alkaline. No water-powers occur. The climate is moderate, but heavy frosts were experienced at the time of the survey. No fuel occurs; wood for camp purposes was obtained from settlers at Willowbunch. No stone-quarries nor minerals occur. The only game is antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
 - This township was reached from township 8, range 24, by travelling west along the north boundaries of township 7, ranges 24 and 25. There are some heavy grades on this trail. The soil varies from clay loam on clay subsoil to sandy loam on sandy subsoil. It supports a good growth of buffalo grass,

Range 25—Continued.

and is best suited for grazing purposes. The surface is everywhere prairie and is in many places roughly rolling and hilly, so that it is not adapted to farming. The climate is moderate, but heavy frosts and high winds were experienced at the time of the survey. Hay is plentiful in the numerous small hay marshes which occur throughout the township. Fresh water is abundant in the hay marshes and sloughs. The lakes in section 4 are fresh, while the other lakes in the township are alkaline, although they are fed by springs. No water-powers occur. No fuel occurs. Coal and wood for camp were brought from Yellowgrass. No stone-quarries nor minerals were found. The only game seen was antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.

(North outline.)—The soil is mostly sandy loam, with gravelly and clay subsoil. This township is approached by trail from Moosejaw, forty miles north. The surface is broken, highly rolling prairie, rather stony and is adapted for mixed farming. Good hay is plentiful and the sloughs contain good water. The climate is dry and bracing and there are no summer frosts. Fuel is obtained from the southwest. No coal, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

(East outline.)—The surface along this line is hilly and best adapted for grazing, as the grass is good and there is plenty of fresh water.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township was reached from township 9, range 26, by travelling along the base line. The soil is of poor quality, being chiefly sand and gravel, and is unfit for agricultural purposes. The township is suited only for grazing. The surface is rolling and hilly prairie with no timber. Marsh grass and redtop are abundant in the numerous small hay marshes. Fresh water is easily found in the hay marshes and sloughs. No streams nor water-powers are found, and the land is not liable to be flooded. At the time of survey (July) there was a violent storm with rain and hail but no frosts. No fuel, stone-quarries nor minerals were found. Ducks were the only game.—J. L. R. Parsons, D.L.S., 1907.

(East outline.)—The surface along this outline is rough and hilly and better suited for grazing than agricultural purposes. The soil and the grass is good and there is a fair supply of water.—O. J. Klotz, D.T.S., 1881.

(Subdivision.)—This township is approached by trail from Moosejaw, thirty-six miles north. The soil is sandy loam and some black loam with sandy, gravelly and clayey subsoil. The surface is rough, rolling, broken prairie, rather stony in places and is adapted to mixed farming. Hay of good quality is plentiful. Small lakes and sloughs abound with good water. The climate is dry and bracing and there are no summer frosts. Fuel is obtainable from the southwest. No coal, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

This township is very much broken by hills, lakes, ponds and sloughs, so that there is almost a continuous obstruction which fact tends to lower considerably the value of the township. In the northern part there are many hills and in the western part there are several lakes and ponds, while in sections 23, 25, 26, 35 and 36 there are also several lakes. Nine lakes in all were traversed. The soil is generally hard and not well adapted for agriculture, and there is not much good grass land for ranching purposes. The surface is all open prairie, there being no timber nor scrub in any part of the township. The water in the lakes is chiefly alkaline, and not fit for domestic

Range 25—Continued.

use, but stock no doubt would get accustomed to it. There are no streams. The climate appears to be fair, with nothing to indicate summer frosts. There are no evidences of coal nor lignite and no fuel of any kind is to be found in this or in any of the adjoining townships. There are no stone-quarries nor minerals of economic value. Game is very scarce, a few ducks being occasionally seen on the lakes. Taking the township as a whole it would not be adapted for farming, yet ranching might be carried on successfully in some sections, as good shelter can be found among the hills for stabling. There is an old trail running through this township from Regina to Willowbunch, which is still sometimes used by travellers and traders. The trail is a very good one and good water can be had along it in some places.—J. Warren, D.L.S., 1905.

(East outline.)—The surface along this outline is hilly prairie much broken 11. by ravines, ridges and lumps. There are occasional small ponds of fresh water. The soil is a clay and sandy loam with gravel and stone, ranking as second-class and third-class.—A. C. Webb, D.L.S., 1881.

(Subdivision)—This township is approached by trail from Moosejaw, twenty-eight miles to the north. The soil is black loam, some sandy loam, with clay subsoil. The surface is highly rolling broken prairie. Hay of good quality is plentiful. There are numerous sloughs with good water. The climate is dry and bracing with no summer frosts. Fuel is obtained from the south west. No coal, minerals or stone-quarries were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

The best way to reach this township is by a trail from Moosejaw. This trail is a very good one and easy to travel on as there are no bad hills nor ravines on the route. The soil is generally clay, in some places very hard and gravelly. From the nature of the soil it would not be adapted to farming, but would be more suitable for ranching as there are many ponds of good water distributed over the township and the pasturage is fairly good. The surface is hilly and rolling, in some places stony and rough. There are scarcely any hay lands, only in places there is some tall grass around the ponds. There are some ponds of good water and there is a lake partly in section 1 and one in sections 8, 9, 16 and 17, both of which are alkaline. There are no streams. There is no fuel to be had in the township and it would have to be obtained from outside places as there are no indications of either coal or lignite. There are no indications of stone anywhere, nor are there any minerals to be found in the township. Game of all kinds is scarce, only a few ducks on some of the ponds. Taking the township as a whole it is better adapted for ranching than for any other purpose.—J. Warren, D.L.S., 1906.

(East outline.)—The surface along this line is rolling and hilly prairie. The soil is a clay loam and sandy loam with gravel and stone in places. The land ranks as first-class and second-class. The northern slope of Dirt hills or Missouri coteau, extends east and west through section 36. There are dry beds of creeks in sections 1 and 13:—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is approached by trail from Moosejaw, twenty-four miles north. The soil is sandy loam, with clay subsoil and is adapted for mixed farming. The surface is highly rolling, broken prairie. Hay of good quality is plentiful. There are numerous sloughs with good water. The climate is dry and bracing and there are no summer frosts. Fuel is obtainable from the southwest. No coal, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

Range 25—Continued.

This township is reached from Moosejaw by a trail which is very good, having no bad hills nor soft places. The soil is generally clay which in most places would be suitable for agriculture. Many settlers have taken homesteads and have very good crops where they have cultivated the land. The surface is generally undulating prairie entirely free from timber. There are some hay lands, but they are of very limited extent. Some ponds were noted which contained good fresh water, while others were alkaline. In sections 19 and 30 there are two large alkaline lakes, the supply in which seems to be permanent. There are no streams. The climate appears to be good and not liable to summer firests. No indications of coal seams near the surface were noted, and no stone nor other minerals were seen. Game is scarce, there being only a few ducks on the ponds. Most of the township is capable of cultivation, but on the whole it is probably better suited for ranching.—J. Warren, D.L.S., 1906.

(North outline.)—The surface along this line is open, gently rolling prairie, **13.** with a soil ranging from sandy loam to heavy clay over a clay loam subsoil generally. A few grassy ponds are scattered along it. A small sluggish creek, in a shallow valley, crosses section 35 in a northerly direction. The land ranks as second-class.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line is undulating and rolling prairie with a clay loam soil and gravelly ridges, which ranks as first-class and second-class. The dry bed of a creek crosses section 12.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is level and rolling prairie with a clay and sandy loam subsoil, and ranks as first-class and second-class. The west part is high and dry and more rolling. There is a small lake in section 3, containing good, fresh water, and there are a few dry creeks, also a coal deposit in the northwest corner of section 19, which is at the foot of Cactus hills. There is some wood in this quarter section in the gully, which is partly ash, cherry, maple and chokecherry, also a few poplar of small dimensions, good for fencing and fuel purposes.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this outline is gently rolling, open 14. prairie with a strong clay soil of great depth, which ranks as second-class. There is a slow muddy creek flowing northeast, in section 35.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line is rolling prairie with a heavy clay soil. A small creek flowing northeast is crossed by this line near the southern limit of section 12, but generally water is scarce.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is open prairie, level on the east but rolling on the western portion. There are some scattered boulders of limestone and grey granite upon the surface in some parts. The soil is from ten to twelve inches deep over a sandy clay subsoil and ranks as first-class.—H. Kerr, D.L.S., 1882.

(North outline.)—The surface along this line is gently rolling, open prairie with an excellent soil of great depth which ranks as first-class. There are a few small sloughs.—F. W. Wilkins, D.T.S., 1882.

Townships West of the Second Meridian.

Range 25—Concluded.

(East outline.)—The surface along this line is undulating to level prairie with a strong heavy clay which ranks as first-class. The land is best suited for grain growing. Moosejaw creek, a stream with a soft, muddy bottom, and a current of half a mile per hour, flows west through section 24. It was the only water crossed along the line.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is open prairie part rolling. Scattered boulders of grey granite and limestone appear upon the surface in some places. The soil is of excellent quality from thirty-six to fifty inches in depth over a clay subsoil and ranks as first-class. Some ash, exists along the banks of Moosejaw creek, in size from five to twenty inches in diameter.—H. Kerr, D.L.S., 1882.

(Ranges 25 and 26.)—This district consists of fine wheat land and is almost all under cultivation except the valley of Moosejaw creek which is generally reserved for pasture. The settlers are very prosperous.—G. A. Bennett, D.L.S., 1912.

(North outline.)—The surface along this line is very broken by ravines running into Moosejaw creek and is full of boulders. The land ranks as third-class. A cart trail to Qu'Appelle crosses the northern portion of section 34.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is undulating and very hummocky prairie. The soil is a heavy clay, suitable for grain growing, and ranks as first-class.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is level and open prairie with a black loam soil of from four to twenty inches in depth over a clay subsoil and ranks as first-class for farming. The Canadian Pacific railway crosses the township from section 25 to section 30. Pasqua station is situated in section 27. Water may be obtained by digging a few feet. Many settlers are located in this township. The soil in this vicinity is good.—Dumais and Michaud, D.L.S., 1883.

RANGE 26.

1. by taking what is known as the "French" trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to the Big Muddy barracks and thence the Willowbunch police trail westerly; it may also be reached from Moosejaw by taking the Willowbunch trail to Willowbunch, thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate might be better adapted to ranching. There are very few sloughs in this township. No timber nor scrub whatever is found, but there are indications of coal suitable for fuel. The climate is very dry, particularly in the summer and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

(Subdivision.)—Moosejaw is the nearest railway station to this township. It is most readily reached by taking the trail to Willowbunch, thence a trail running southerly which passes through the west part of the township. This is a fairly good trail. The soil is a clay loam with a clay subsoil, but there is considerable gravel in places. Grain could probably be grown here with fair success, as most of the township might be described as rolling. No timber nor scrub of any kind grows here, but wood for fuel may be obtained in township 3, range 25. In all probability seams of lignite underlie this township, although no indications of it or any other minerals

Range 26—Continued.

were seen. A stream of fairly fresh water flows through the west part of the township. It furnishes a permanent supply of water as it is fed by numerous springs along its banks. It is not sufficiently large for any water-power. The adjacent plots are rather marshy in the spring, but practically no land is subject to flooding. A small quantity of hay can be cut on the creek flats and in a few sloughs, but the amount is limited. The climate is generally supposed to be dry, but this season, during June and July, there were numerous electrical storms accompanied by high winds and frequently by hail, which would have been disastrous to crops had there been any in the locality. The month of August was as dry as anyone could wish. No frost occured between May 24 and August 27. A few ducks and grouse were the only game seen.—I. J. Steele, D.L.S., 1909.

- This township may be reached from Moosejaw by taking the Willowbunch trail to Willowbunch then the Scobie trail running southerly which enters this township in section 19. It may also be reached from Weyburn by taking what is known as the "Gap" trail to Livingstone's ranch, thence following the trail in the Big Muddy valley to Holly's ranch at the northeast corner of township 3, thence taking one of Holly's hay trails to within a mile or two of the north boundary of the township. The soil is a clay loam from two to ten inches deep but in the southerly part of the township there is considerable gravel. The subsoil is a hard, white, gravelly clay. The soil in some places might be suitable for agriculture but the whole township with the exception of two or three sections is too hilly and broken and the climate is so unsatisfactory that this township is probably more suitable for ranching purposes. No timber nor scrub grows in this township and the surface as stated above may be described as hilly prairie, the hills having no regularity or definite formation. There is some hay slough, about twenty acres in extent, in section 25 and a certain amount of hay is obtainable along the creek which runs through the western part of the township. This fresh-water creek is about three feet wide and a few inches deep and with the exception of a few sloughs in the northeasterly part is the only water in the township. There are no water-powers on it. The climate is very dry particularly in the summer, and the winters are reported to be long and severe. There are also summer frosts. No stone-quarries nor minerals were discovered. A few ducks were the only game seen but there are supposed to be a few antelopes in the locality.—I. J. Steele, D.L.S., 1908.
- This township is most easily reached from Weyburn by taking what is known as the "Gap" trail to Livingstone's ranch, thence following the trail in the Big Muddy valley to Holly's ranch, which is at the northeast corner of the township. This trail is good except in spring. The soil is a clay loam with a hard, dry, clay subsoil and might be suitable for crop raising if other things were favourable. There is no timber in this township but a little scrub grows in the northerly part. The surface is rather broken, particularly in the northeast corner and along the north boundary. There are a few small hay stoughs in the east half of the township, but the hay is rather coarse and inferior and in no great quantity. A small permanent lake of good fresh-water covers parts of sections 1 and 12. There is also a small fresh-water creek running through sections 6 and 7 which does not go dry. At the time of the survey (October) it was about three feet wide and eight inches deep. There are no water-powers on it. The few hay sloughs dry up early and are of little importance. The climate is generally very dry, particularly in the summer. There are late spring and early fall frosts, and the winters are said to be severe. A small quantity of scrub is available for fuel in the northerly part of the township and there is considerable in

Townships West of the Second Meridian.

Range 26—Continued.

township 3, range 25. No coal nor lignite veins were found, nor were any stone-quarries nor minerals discovered. No game was seen but there are supposed to be a few antelopes in the locality.—I. J. Steele, D.L.S., 1908.

- The surface of the country in this township is generally rolling. Toward the south it becomes quite hilly. The flats are watered by springs which flow out of the sides of the hills. The soil is a good sandy loam with, usually, a clay subsoil.—J. Bourgeois, D.L.S., 1886.
- The surface of this township is undulating. The soil is a sandy loam with a clay subsoil. The northeast corner of the township is cut off by Willowbunch lake, the water in which is not potable. This locality is very dry and of very little use for agricultural purposes.—J. Bourgeois, D.L.S., 1886.
- 6. the Willowbunch trail which crosses from east to west within one mile of the north boundary. The soil is chiefly black loam of an average of five inches over clay subsoil, with some sandy loam over clay subsoil, and is well suited for farming. The surface is everywhere prairie, and is gently rolling, or rolling, except immediately adjoining Willowbunch lake where it is broken by coulées. No timber occurs. A limited quantity of hay is to be found in the hay marshes which, however, are not numerous. Fresh water occurs in the sloughs and hay marshes. The water in Willowbunch lake is salt but stock like it. No streams occur. The climate is moderate with heavy frosts at the time of the survey. Some dead wood was found in the coulées near Willowbunch lake. No coal, stone-quarries nor minerals were found. The only game is ducks and geese.—J. L. R. Parsons, D.L.S., 1905.
- This township was reached from township 8, range 26, by travelling south along the east boundaries of sections 24, 27, 22, 15, 10 and 3, which afford a good trail. The township is crossed in its southern part by the trail from Weyburn to Willowbunch which is in good condition. The soil varies from black loam on clay subsoil to sandy loam on sandy subsoil; it is, however, all good farming land. The climate is moderate with heavy frosts at the time of the survey. The surface is everywhere prairie and is rolling or gently rolling. Good hay is to be found in the numerous hay marshes throughout the township. It is chiefly redtop and marsh grass. Fresh water is abundant in the hay marshes and sloughs. No streams occur. A small lake in section 13 is alkaline. Wood for camp purposes was obtained from the settlers at Willowbunch as timber and fuel were not available in this township. No stone-quarries nor minerals were found. The only game is antelopes, ducks and geese.—

 J. L. R. Parsons, D.L.S., 1905.
- 8. This township was reached from township 8, range 25, by travelling west along the north boundaries of township 7, ranges 25 and 26. The soil varies from back loam overlying clay subsoil to sandy loam overlying sandy subsoil. It supports a good growth of buffalo grass and affords good grazing. The surface is everywhere prairie. It is roughly rolling to hilly toward the south and east parts, but is more level toward the west and northwest. The climate is moderate with heavy frosts and high winds at the time of the survey. Hay is plentiful in the numerous hay marshes and is chiefly marsh grass of good quality. Fresh water was to be found at the time of the survey in the hay marshes and sloughs. A lake in section 3 is alkaline, but is fed by springs. No water-powers occur. There is no timber nor fuel so that coal and wood for camp were brought from Yellowgrass. No stone-quarries nor minerals were found. The only game seen was antelopes, ducks and geese.—J. L. R. Parsons, D.L.S., 1905.

Range 26—Continued.

(East outline.)—The surface along this line is heavily rolling prairie. The slopes average from fifteen to thirty feet in height. There are numerous small marshes and alkaline ponds situated in sections 1 and 12. A cart trail from Willowbunch to Regina crosses section 12. The soil is poor, being sand and gravel with clay, sand, gravel and yellow sand subsoils, ranking as third-class and fourth-class.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township was reached from township 9, range 27, by travelling eastward along the third base line. The soil is light, but would make fair farming land. The surface is everywhere prairie with no timber. A considerable quantity of marsh grass and redtop occurs in the numerous small hay marshes. Fresh water is found in the sloughs and marshes, and is easily obtainable. The climate is moderate with no summer frosts. No fuel, stone-quarries nor minerals were found. Ducks were the only game seen.—J. L. R. Parsons, D.L.S., 1907.

(East outline.)—The surface along this line is very hilly prairie containing 10. a few small sloughs and open ponds. The soil is sandy and gravel, over sand, clay and gravel subsoils and ranks as third-class, while the northeast half of section 1 contains fourth-class soil. Section 36 is greatly broken with hills, about 250 feet above the level of the valley, and section 25 is rocky, while section 31 ranks as second-class.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The soil is sandy loam, with clay subsoil and is adapted for mixed farming; the soil in section 8 is alkaline. The surface is highly broken prairie. Hay of very good quality is very plentiful. There are numerous sloughs containing good water. The climate is dry and bracing, and there are no summer frosts. Fuel can be obtained from bush six miles distant. No coal veins, stone-quarries nor minerals were observed. Prairie-chickens are fairly plentiful.—A. F. Martin, D.L.S., 1904.

This township on the whole is undulating and in the northern part very hilly, some hills being from 250 to 300 feet high. The southerly part is not so much broken and contains some fairly good land that could be cultivated. There are no have lands of any extent, what there is, being chiefly short grass. Water in general is not very plentiful, but some pends have a fairly good supply. In sections 5 and 6 there are two lakes, the water in which is strongly alkaline and not fit for use. There are no streams in the township. The climate seems to be favourable and not subject to summer frosts. Game is scarce, there being only a few ducks on the pends and lakes. The township on the whole is not suitable for farming, only part of the south, in which are some sections of fairly good land, and there are some localities that would be suitable for ranching purposes, as good she'ter can be had in the hilly portions to the north, while a fair supply of fuel can be had in the southerly portions and also among the hills.—J. Warren, D.L.S., 1905.

(East outline.)—The surface along this line is rolling prairie hilly and un11. even, with ridges twenty-five to one hundred feet high. The soil is black
clay, clay and sandy loams over brown clay, white clay and gravel subsoils
and ranks as third-class. There are a few ponds and marshes, and a small creek
crosses section 36.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is approached by trail from Moosejaw, thirty miles north. The soil is sandy loam, twelve inches deep, with clay and gravelly subsoil and is adapted for mixed farming. The surface is highly rolling, broken prai-

Range 26—Continued.

rie. Hay of good quality is very plentiful. There are about seven small lakes and numerous sloughs with good clear water. The climate is dry and bracing and there are no summer frosts. Fuel is obtained from bush to the southeast. No coal, stone-quarries, nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

The route to this township is by trail from Moosejaw. This trail is a very good one, especially in the summer, there being no hills nor wet marshy places. The greater portion of the soil is hard clay, which is not suitable for agricultural purposes. Generally the township is better adapted for ranching than for farming, as the pasturage is fairly good, and there is plenty of water. The surface is open prairie, in many places quite hilly, and in some places very rough. There are a few small hay marshes, but not of any etxent. Besides numerous ponds, there are two lakes of considerable size namely Agnellice and Petallen. The water in the lakes is quite alkaline, but there is a very nice spring near the northwest angle of lake Agnellice, which is very good water. There are no streams of water in any part of the township. Wood can be obtained at Moosejaw. There are no indications of minerals, coal nor stone. Game is also scarce, there being only a few ducks on the ponds or lakes. From the general features of the township it is better adapted for ranching than for any other purpose. There are no ranchers located in any part of the township, though there are many good locations as there are some ravines that would give good shelter.—J. Warren, D.L.S., 1906.

(North outline.)—The surface along this line is hilly and broken prairie with a sandy and clay loam soil. There are some gravelly and stony ridges and ravines. There are occasional ponds and marshes.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is rolling and hilly prairie. The ridges range from twenty to forty feet in height. The soil is a clay loam, sandy and gravelly, over a subsoil of white and dark clay, also some gravel, and ranks as third-class.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is approached by trail from Moosejaw, twenty-four miles north. The soil is sandy loam with clay subsoil and is adapted for mixed farming. The surface is highly broken, rolling prairie. Hay of good quality is plentiful. There are numerous sloughs with good water. The climate is dry and bracing with an even temperature and no summer frosts. Fuel can be obtained from bush six miles distant. No coal veins, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

The route to this township is by trail from Moosejaw. The trail is a very good one and generally level with no bad hills nor marshes along the route. The greater part of the soil in this township is very hard and not in any way favourable for farming. The land is better adapted for ranching purposes as the surface is entirely open prairie. There are some good hay lands, but of a limited extent. There are many ponds in the township, some of which contain very good water, while others are quite alkaline. Stone is abundant in some localities. Wood can be obtained at Moosejaw. Game is scarce, only a few ducks on the ponds being seen. There are two ranchers located in section 12 who have a very good outfit of horses and cattle, and a comfortable location.—J. Warren, D.L.S., 1906.

Range 26—Continued.

(North outline.)—This outline lies along the northern slope of the Scratching and Cactus hills. It is stony and sometimes gravelly on the tops of ridges and hills. The last feature prevails along all the boundaries. The soil is a clay loam over a clay subsoil and ranks as third-class.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line for the first three miles going north, lies on the eastern flank of rolling hills, rising to north and west. The soil is a fair clay loam over a loose clay subsoil. The next three miles ascend and cross near the northeast end of the range of hills known as Cactus hills. The elevation of these hills, where crossed, is about 425 feet above the plains on the north side. There are a number of deep ravines on the northerly side of these hills, containing considerable quantities of good firewood, principally maple, ash and poplar, with plenty of cherry and thorn bush. The land ranks as third-class.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township is very broken and hilly with a soil composed of sandy loam over a clay subsoil and ranks as third-class. Cactus hills throughout are gravelly and stony on top. There is a large lake on the south boundary covering parts of sections 4 and 5. There is a coal deposit in the northwest quarter of section 1. There is some wood on the hill between sections 1 and 2, composed of ash, cherry, poplar and willow, good for fuel only. There is some good farming land in the northwest corner.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface on all the boundaries is an open gently 14. rolling prairie with a few small sloughs. The soil is a clay loam on the west half of the north and heavy clay on the east half. It ranks all as first-class.—
F. W. Wilkins, D.T.S., 1882.

(East outline.)—The soil along this line is generally a strong clay of great depth and ranks as second-class. There are a few sloughs and cactus.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—This township as a whole is all level and gently rolling prairie with a sandy loam soil and is excellent wheat land ranking as first-class and second-class. Fuel may be obtained in the Scratching hills, at the foot of which there is a deposit of coal, which if worked would increase the value of this township. Water may be obtained by digging a few feet.—Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is rolling prairie with a few cherry bushes and small poplar in places. The soil varies from almost pure sand to a light sandy loam and ranks as third-class.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line is rolling prairie with a soil varying from strong clay in section 1 to clay loam in section 12, and to sandy loam up to section 36, where it is again strong clay and ranks as second-class. Moosejaw creek, flowing in a westerly direction, is crossed three times in section 36, and is here a fine stream of twenty feet in width and two and a half feet in depth, and has a current of about three miles per hour, winding about in a valley about seventy feet deep and one-third of a mile wide. There is a considerable quantity of wood in the valley. It is ash and maple principally.—F. W. Wilkins, D.T.S., 1882.

RANGE 26—Continued.

(Subdivision.)—The land in this township is rolling, open prairie, with a sandy loam soil over a clay loam and sandy subsoil. It ranks as second-class and is excellent wheat land. There is no timber except in the north of sections 35 and 36, on the banks of Moosejaw creek. There is also a little fuel and fencing wood at the Scratching hills about fifteen or twenty miles distant. There is water in several places, but it can be obtained anywhere by digging. There are some improvements in this township and it will soon be settled. The proximity of the Canadian Pacific railway and the town of Moosejaw will offer a good market.—Dumais and Michaud, D.L.S., 1883.

(See report for township 15, range 25, west of the second meridian).—G. A. Bennett, D.L.S., 1912.

This township can easily be reached from Moosejaw as there is a graded road leading south from the city. All the road allowances are practicable and mostly all opened. A branch line of the Canadian Northern railway, which is being constructed from Moosejaw, crosses this township in section 24, 23, 26 and 34. The soil is mostly sandy loam and nearly all under cultivation. A few old quarters are still open prairie and are used as pasture. The surface is rolling along the northern boundary of sections 34, 35 and 36, and gently undulating elsewhere. The only wood there is, is found in a few clumps of willow brush along the northern boundary of sections 34, 35 and 36. There are no hay sloughs nor prairie hay. Good well water is easily obtained at depths of from fifty to one hundred feet. Moosejaw creek, crossing the northern boundary of section 35 also furnishes water, but the supply is too small to develop power. Up to the end of this survey the climate has been hot with There was one harmless summer frost in June. The fuel consists frequent rains. of coal which is obtained at Moosejaw. Game is very scarce, only a few prairiechickens being seen. No indications of stone nor minerals of economic value were noticed.—C. Rinfret, D.L.S., 1911.

(North outline.)—The surface along this line is undulating prairie and the **16.** sides of the hills are rough and full of boulders. The soil is a hard dry clay and ranks as third-class. Moosejaw and Thunder creeks unite in section 33, and flow northeasterly through sections 34, 35 and 36. Another small creek, flowing northeasterly, crosses the line three times in the northwest portion of section 33. —W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is gently rolling prairie with a good clay soil which ranks as first-class. The north half of section 36 is in the valley of Moosejaw creek. This valley is very stony. The Canadian Pacific railway crosses the township and the Cypress trail lies in the same direction as the railway.—F. W. Wilkins. D.T.S., 1882.

(Subdivision.)—The land in this township is level or gently rolling prairie with a loam soil of about six inches in depth over a clay loam subsoil and ranks as first-class for farming. The Canadian Pacific railway crosses the township from sections 36 to 31 and the town of Moosejaw is situated in sections 32 and 33. It is prosperous and flourishing. The Canadian Pacific Railway Company has here erected a dining hall, roundhouse and workshops. This township is well watered by Moosejaw creek, which runs northwesterly from sections 1 to 27, and northeasterly from sections 27 to 36. Fuel and fencing wood can be obtained on the banks of the creek. This township, owing to the fertility of its soil, the Canadian Pacific railway, and a good market, should be very attractive to settlers.—Dumais and Michaud, D.L.S., 1883.

RANGE 26—Concluded.

The main line of the Canadian Pacific railway passes through the northern part of this township, and along this line, in sections 32 and 33, is situated the city of Moosejaw. The grade line of the Canadian Northern railway, at the time of survey (July 20th), was down as far as sections 35, 20 and 9. The soil is heavy black loam over a clay subsoil and is well adapted to grain growing. At the time of the survey, excellent fields of wheat, oats and flax were observed. The surface is almost level, save where the Moosejaw creek runs, and here, the banks are very steep and the course of the creek is extremely crooked. Water in this district is very scarce and about the only available source is from Moosejaw creek. The climate appears to be free from summer frosts. No coal nor other minerals are found. Small poplar and willow scrub grows along the banks of the Moosejaw creek. The only fuel is coal. No water-power can be developed. No game was seen.—C. Rinfret, D.L.S., 1911.

RANGE 27.

taking what is known as the French trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to the Big Muddy barracks and thence the Willowbunch police trail westerly; it may also be reached from Moosejaw by taking the Willowbunch trail to Willowbunch thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate, might be better adapted to ranching. There are very few sloughs in this township. No timber nor scrub whatever is found but there are indications of coal suitable for fuel. The climate is very dry, particularly in the summer, and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

(Subdivision.)—This township is most readily reached from Moosejaw, the nearest railway point, by taking the trail to Willowbunch, thence a trail running southerly to near the northeast corner of the township. This is a fairly good trail. The soil is mostly a clay loam and a clay subsoil with some gravel in places. Crops could probably be grown here successfully as most of the township, with the exception of the southwest corner, is rolling. Practically no hay can be obtained as there are few sloughs and the upland grass does not grow long enough to be cut. Water is rather scarce as the only supply is a small creek flowing through sections 35, 36 and 25. Although this is fed by springs higher up it goes dry in summer. It is much too small for any water-power. The climate is generally supposed to be dry, but this season during June and July dry weather was conspicuous by its absence. There were frequent thunder-storms accompanied by high winds and frequently by hail which would have been disastrous to crops had there been any in the locality. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. No timber nor scrub of any description grows here. Wood for fuel can be obtained in township 3, range 25. No indications of lignite were seen, nor were there any other minerals nor stone-quarries noticed. No game was seen.—I. J. Steele, D.L.S., 1909.

This township may be reached from Moosejaw by taking the Willowbunch trail to Willowbunch, thence a trail going southerly which enters this township on the north boundary of section 35. It may also be reached from Weyburn by taking what is known as the "Gap" trail to Livingstone's ranch, thence following the trail in the Big Muddy valley to Holly's ranch at the northeast corner of township 3, range 26, thence across the prairie to this township. The soil is a clay loam from two to ten inches in depth but in many places there is considerable gravel. The

Townships West of the Second Meridian.

RANGE 27—Continued.

subsoil is a hard, white, gravelly clay. In the northerly part of the township there is a good growth of grass, appearing to indicate a fairly rich soil which might be suitable for agricultural purposes if other conditions were favourable. In the southerly part of the township there seems to be more gravel and some alkali in the vicinity of the creek running across the township. No timber nor scrub whatever is found in this township and the surface as a whole may be described as rolling with the exception of some hills in sections 30 and 31 and in sections 26, 27, 34 and 36. There are no hay sloughs in this township but there is a fairly rank growth of grass in some places along the creeks which might be utilized for hay. A fresh-water creek three feet wide and a few inches deep runs through section 36 which does not appear to go dry and there is also a creek entering the township on the west boundary of section 18 and leaving it at the south boundary of section 2, but it dries up in the dry season. However, a number of springs along its banks make a permanent supply of excellent water for all ordinary purposes. Neither stream is large enough for water-powers. There are no sloughs and no lands subject to floods. The main feature of the climate in this locality is the lack of rain during the summer which would be the principal drawback to grain raising, although there would also be considerable danger from summer frosts. It is understood that the winters are rather long and severe. There is no fuel whatever in this township unless there are underlying coal seams, which is quite possible as there are indications of coal not far away. A certain amount of scrub along the Big Muddy valley is available for fuel. No game was seen in this township with the exception of a few ducks but it is understood that there are some antelopes in this locality. All things considered, this township would not make very good farming land but ought to be excellent for ranching purposes.—I. J. Steele, D.L.S., 1908.

- The southwest portion of this township is stony, but the remainder of the land is of fair quality, being a sandy loam with a clay subsoil. The only water obtainable is in a branch of Poplar river which flows through the eastern part of the township.—F. E. Brunelle, D.L.S., 1886.
- (North outline.)—The soil in this locality is very rich, giving an enormous yield of grain and vegetables. There is a fair supply of wood of various kinds in the Muddy Creek valley and some lignite was also seen.—J. McLatchie, D.L.S., 1881.

(Subdivision.)—The northeast portion of this township is hilly. Good water is easily obtained in the ravines and also in a large hay swamp in section 2. The soil is a good sandy loam with a clay subsoil.—J. Bourgeois, D.L.S., 1886.

- 5. There is a small half-breed settlement and a Catholic mission in the flat at the foot of the hills. The land around the settlement is well fenced and cultivated. The soil is generally a good sandy loam overlying a clay subsoil.—J. Bourgeois, D.L.S., 1886.
- This township is crossed, from east to west, by Willowbunch lake. The country in the northern part of the township is rolling and has a sandy loam soil overlying a clay subsoil, while that portion adjoining the lake is rolling and hilly and has a light clay soil with a gravelly or clay subsoil. The only potable water found in the township was in two ravines in the north bank of the lake. If it was not for the want of good water, a large part of the township would be suitable for settlement.—J. Bourgeois, D.L.S., 1886.

Range 27—Continued.

- The best route for reaching this township, distant about sixty miles southerly from Moosejaw, is by way of the trail from Moosejaw to Willowbunch. This trail is generally in good condition, though it is somewhat hilly in places. The soil is chiefly clay or clay loam with a stiff clay subsoil in places and would be suitable for growing all the usual cereals and vegetables of the Northwest. western and northern portions of this township are hilly and somewhat broken in places, but the eastern and southern portions are rolling. A small amount of scrub cherry trees in the bottoms of some deep coulées in sections 33 and 34 is the only scrub in this township. All the rest of the township is open prairie. Little or no hay could be cut, but practically the whole township is covered with a good quantity of upland grass suitable for grazing purposes. Water which is permanent and only slightly alkaline, can be procured in dry seasons in sections 25, 26, 28, 33 and 36. Elsewhere there is little or no water. A large spring of good water exists in the northwest quarter of section 28, but soon after leaving the spring it becomes impregnated with alkali. A deep valley runs through portions of sections 6, 7, 8, 17, 18, 20, 28, 29 and 30. The lands in the bottom of this valley are liable to be flooded for a short time in the spring. No water-power could be generated in this township. During the early part of September when this township was subdivided, fine warm days and cool nights were experienced. There exists a vein of black lignite in a valley in the northeast quarter of section 28, about ten chains in a southwesterly direction from the northeast corner of the section. The vein lies in a horizontal position, and the part that had been uncovered consisted of two veins, each about one foot thick and about six inches apart. This lignite burns freely when in large pieces, but on exposure to the atmosphere it quickly disintegrates and becomes a mass of "slack." A strong spring of good water comes out of this vein. In fact in this part of the district wherever coal or lignite occurs water also is to be found, and though the reverse has not been proved to be true, in many cases where springs exist considerable quantities of lignite have been picked up. A considerable number of boulders and stones exists on the surface, but no stone in place was observed. No economically valuable minerals, with the exception of the above-mentioned lignite, were seen. Some antelopes, a few prairie-chickens, geese, ducks, and rabbits were seen.—H. S. Holcroft, D.L.S., 1906.
- The trail from Moosejaw to Willowbunch passes through the westerly part of this township and forms the best way of getting to it. This trail is in 8. good order, but is somewhat hilly in places. The soil of this township is, generally speaking, clay; but clay loam and sandy clay appear in many places as a surface soil. In some places, particularly in the western range of sections, a layer of alkaline-impregnated earth exists at the depth of a few inches below the surface. This deposit varies in thickness from a few inches to two or three feet. Stones and gravel occur in a few places, though not in large quantities. This township is well suited for grazing or general farming purposes. This township is open, rolling prairie. somewhat hilly in the eastern portion, sections 6 and 7 being the only portions that are nearly level. No timber is to be found in this township. Hay marshes of varying size, averaging about twelve acres in area, are well distributed over the surface. These marshes contain a luxuriant growth of wild hay. A good quantity of upland grass grows all over the township. There are no lakes nor rivers in this township. A few sloughs occur in the northeastern portion, but all the water is too alkaline for human consumption, with the exception of a spring beside the Moosejaw and Willowbunch trail in the northwest quarter of section 32. This water is slightly alkaline also. It is called the "Twenty-five mile spring," being twenty-five miles northerly

Townships West of the Second Meridian.

RANGE 27—Continued.

from Willowbunch. This spring is the only permanent drinkable water in the township. None of the land is liable to be flooded to any greater extent than is caused by the melting of the snow together with the spring rains. No water-powers occur in this township. During the first week in September, in which this township was subdivided, the weather was warm and dry with cool nights, but no frosts. There is no fuel in this township, the nearest wood being about ten miles southerly in townships 25, ranges 27 and 28, where there is some cottonwood and poplar. Lignite can be procured from a vein in township 7, range 27. No coal nor lignite veins were seen in this township. No stone in place nor minerals of economic value were encountered. Ducks of different kinds, a few geese and some antelopes were seen.—H. S. Holcroft, D.L.S., 1906.

(East outline.)—The surface along this line is very high, rolling prairie land, **9.** the slopes ranging from fifteen to thirty feet in height. The soil is a sandy loam, with white and dark clay, also gravel subsoils, and ranks as second-class and third-class. There are numerous small marshes scattered about and there is a large alkaline pond in section 12.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township was reached from township 6, range 30, by following the Moosejaw-Wood Mountain trail to the third base line and thence easterly. The soil is light but of fair quality, and is suited for agricultural purposes. The surface is everywhere prairie. Marsh grass and redtop of good quality are to be found in the numerous small hay marshes throughout the township. Fresh water was easily obtainable at the time of survey (July) in the sloughs and marshes which abound in the township. No streams occur and the land is not liable to be flooded. The climate is moderate with no summer frosts at the time of survey. No fuel, stone-quarries nor minerals were found. Ducks were the only game seen.—J. L. R. Parsons, D.L.S., 1907.

(East outline.)—The surface along this line is very hilly prairie land, the 10. hills ranging from 50 to 250 feet in height. The soil is a sandy loam over subsoils of light and dark clays, also in places sandy and gravelly. It ranks as third-class. The northeast half of section 36 ranks as second-class. There are several small marshes.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is approached by trail from Moosejaw, thirty miles north. The soil is generally sandy loam averaging twelve inches deep, with clay subsoil and is adapted for mixed farming. Hay of good quality is plentiful. The climate is dry and bracing and there are no summer frosts. Fuel can be obtained from bush to the south. There are numerous sloughs containing good water. No coal, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

The surface of this township is undulating and entirely open, treeless prairie with a clay and clay loam soil which ranks as first-class. When cultivated it would be suitable for the growing of grain and roots. In the eastern part the land is very hilly and in places the soil is hard and gravelly. There are a few hay marshes in the southern part containing good water which is the only supply in the township. The climate seems to be favourable with no indications of summer frosts. There are no indications of coal, lignite nor other fuel and no stone-quarries nor minerals. In some parts the pasturage is fairly good and ranching might be carried on successfully, although the scarcity of hay would be a drawback in winter. Game is scarce owing partly to the scarcity of water. The trail from Moosejaw to Willowbunch runs past the westerly side of the township which makes it easy of access.—J. Warren, D.L.S., 1905.

Range 27—Continued.

(East outline.)—The surface along this line is hilly prairie land with several 11. ponds and marshes. The hills range from thirty to seventy feet in height, the soil is clay and sandy loams over a subsoil of light and dark clays and ranks as second- and third-class. There is a large alkaline pond in section 24.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is approached by trail from Moosejaw, thirty miles north. The soil is sandy loam, with some black loam, having clay subsoil and is adapted for mixed farming. The surface is highly rolling, open prairie. Hay is plentiful and of good quality. There are numerous sloughs containing good clear water. The climate is dry and bracing with an even temperature and no summer frosts. Fuel is obtained from bush about six miles distant. No coal, stone-quarries nor minerals were observed. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

This is, on the whole, rather an inferior township, there being a great deal of broken, rough and alkaline land in it. The surface is entirely prairie, very undulating and having many ponds or sloughs. Wood for fuel had to be teamed from Moosejaw. There does not appear to be any hay land or marshes that would yield hay. There are many ponds in which the water is quite alkaline and unfit for use. The only water supply is to be found in the ponds. There is a bay or branch of the Lake of the Rivers in the southwestern part of the township, the water in which is quite alkaline. There are no fixed rocks nor stone-quarries to be seen. There is one place near Lake of the Rivers where a sort of coal is to be found, but it does not appear to be in any quantity. There are no streams nor springs. This township could only be used for ranching, as the soil does not appear to be suitable for farming, though the climate appears to be favourable. The trail from Moosejaw to Willowbunch passes through the western part of the township, which makes it quite easy of access at all times as the trail is a very good one.—J. Warren, D.L.S., 1905.

(East outline.)—The surface along this line is rolling and hilly prairie, the 12. elevations ranging from twenty to forty feet in height. The soil is a clay loam sandy and gravelly over subsoils of white and dark clay, also some gravel, and ranks as third-class. Several large ponds and marshes were crossed and a chain of alkaline ponds is situated in the southeast of section 13, also two larger ones in section 12. A cart trail crosses sections 1 and 12.—A. O. Wheeler, D.L.S., 1883.

This township is very rough, hilly and open prairie, especially in the northern part, which contains many high hills. The soil is very hard clay in most places, but in the southerly part is more loamy and there are a few good sections of land. The soil generally is not adapted for agriculture, but many localities would be suitable for ranching purposes. There are no large hay marshes, the only hay being around the ponds and sloughs. There appears to be a permanent supply of water in many places in the sloughs and ponds. For the most part the water is fresh though there is a good deal of alkali in some. The climate appears to be favourable and there are no indications that summer frosts would be common. There is no fuel to be found, nor so far as could be ascertained can any be found anywhere near. There are no fixed rocks in any part of the township, but there are in many places plenty of stones that could be used for building purposes. Neither are there indications of minerals of any kind. There is no game, except a few ducks. On the whole, this township might be used for ranching purposes, as the pasturage in many places is good and shelter could be found among the hills. The township is quite easy of access, as the Willowbunch trail passes close to the western boundary. The trail from Moosejaw to Willowbunch is very good and in fair repair.—J. Warren, D.L.S., 1905.

Townships West of the Second Meridian.

RANGE 27—Continued.

The township is approached by trail from Moosejaw, twenty-four miles north. The soil is a sandy loam generally, but a black loam in some places, with a clay subsoil and is adapted for mixed farming. The surface is highly broken, open prairie. Hay is plentiful and of good quality. There are numerous sloughs containing good water. The climate is dry and bracing, with an even temperature and no summer frost. Fuel can be obtained from bush six miles distant. No coal veins, stone-quarries nor minerals were observed. Prairie-chickens and ducks are fairly plentiful.—A. F. Martin, D.L.S., 1904.

(North outline.)—The surface along this line in sections 31 to 33 is rolling, decreasing in elevation to the east, with numerous ponds. The tops of the hills are stony and gravelly in general and rank as third-class. Sections 34 to 36 lie along the north flanks of rolling hills, with some ponds, and are a little stony in places, with a fair clay loam soil ranking as second-class.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line lies entirely in rolling hills, some of considerable altitude, with numerous ponds and marshes. The tops of the hills generally are stony and gravelly. The soil is a good clay loam over a clay subsoil and ranks as third-class.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township is very undulating, especially the southwest part and is as a general rule unfit for agriculture. Several swamps containing soft fresh water were seen and the land surrounding them is suitable for pasturage. The soil is a sandy loam over a sand subsoil, ranking as third- and fourth-class.—C. F. Leclerc, D.L.S., 1883.

(North outline.)—The surface along this line is in rolling hills, across section 31. The escarpment of the Coteau is in section 32, and the balance of this line is in hilly prairie, with numerous sloughs all along, and the tops of hills always stony. The soil is a light clay loam over a clay subsoil and ranks as third-class.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line is open, rolling prairie. A few stones and a little gravel occur in places. The soil is generally a clay loam over a clay subsoil and ranks as first-class. A large number of sloughs occur and in section 13 there is a lake of 150 acres in area. The Wood Mountain trail crosses section 36.— F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in the western portion of this township is unfit for agriculture. The remaining portion offers some advantages, being slightly undulating, with a great many swamps of fresh water, and contains good pasture land.—C. F. Leclerc, D.L.S., 1883.

(North outline.)—The surface along this line is gently rolling open prairie with a few small ponds. The soil is generally a gravelly loam from sections 31 to 34, while sections 35 and 36 are almost pure sand.—F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this outline is open prairie, with a soil ranging from clay loam on the south, to sandy loam and almost pure sand at the extreme north. It averages second-class. There are a few sloughs.—F. W. Wilkins, D.T.S., 1882.

RANGE 27.—Concluded.

(Subdivision.)—The land in the western part of this township is very broken by the rolling hills of the Grand Coteau. The soil in this part is sandy loam, stony and gravelly on the tops of hills. This part of the township is well adapted for cattle raising. The remainder is gently rolling prairie with a sandy loam soil and ranks as first-class farming land. There are numerous hay swamps and ponds. There is no timber, the nearest being in the vicinity of Scratching hills, from ten to fifteen miles distant. Water is plentiful. There is a small lake in sections 28 and 33, in which the water is clear and fresh. There are also some good hay marshes. As a general rule this township is adapted for stock raising and also for agricultural purposes.—

Dumais and Michaud, D.L.S., 1883.

(North outline.)—The surface along this line is undulating, gradually slop16. ing to the south and west, to Thunder creek. The soil is very hard and dry clay and ranks as third-class. There is a slight growth of grass. Sections 31 and 32 are in the valley of Thunder creek. The soil is fair and ranks as second-class and third-class. Two cart trails, the Canadian Pacific railway, and a small creek, flowing northeasterly cross section 31.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this outline is open, gently rolling prairie with a soil, in section 1, of almost pure sand, but the balance has a good clay soil which ranks as first-class. Thunder creek was crossed in section 36. This is a very small stream with quite a swift current. The Cypress trail crosses section 25 and the Canadian Pacific railway crosses section 36. There is some wood in this township.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township as a whole is rolling, open prairie, although some sections are very level. The soil is composed of loam with a clay loam subsoil, and ranks as first-class for farming purposes. The south part of this township is sandy loam and gravelly, ranking as second-class. Thunder creek, which crosses from sections 32 to 36, furnishes good fresh water. The Canadian Pacific railway crosses the township from sections 31 to 25. Many settlers have located here. —Dumais and Michaud, D.L.S., 1888.

RANGE 28.

(East outline.)—This township may be reached from Weyburn by taking the what is known as the French trail to the Diamond crossing at the east end of Big Muddy lake, thence taking the police trail to Big Muddy barracks and thence the Willowbunch police trail westerly; it may also be reached from Moosejaw by taking the Willowbunch trail to Willowbunch thence the Scobie trail southerly. This township is not quite as hilly as the townships to the north, and in places is fairly level. The soil in places might be suitable for agriculture, but owing to the dryness of the climate, might be better adapted to ranching. There are very few sloughs in this township. No timber nor scrub whatever is found, but there are indications of coal suitable for fuel. The climate is very dry particularly in the summer, and the winters are reported to be very severe.—I. J. Steele, D.L.S., 1908.

This township is most readily reached from Moosejaw, the nearest railway point, by taking the trail to Willowbunch, thence a settlement trail to township 3, thence across country. This trail is a good one as far as Willowbunch. The soil is mostly a clay loam with a clay subsoil, but in some places there is considerable gravel and the flats are rather alkaline. The soil would probably grow crops, but there are very few places sufficiently level. Almost the entire township is badly cut up by deep ravines

RANGE 28—Continued.

and valleys. No timber nor scrub of any kind grows here. Wood for fuel can be obtained in township 2, range 29, but the supply will soon be exhausted. No indication of lignite nor other minerals were noticed, nor were any stone-quarries seen. A small creek flows across the southwest corner of the township, but the water is rather alkaline. This constitutes the only supply of water, as there are very few sloughs in the locality. There are of course no water-powers, as the creek probably disappears in dry weather. The supply of hay is limited, but a small quantity can be cut in places in the creek flats. The upland grass does not grow long enough to cut. The climate is generally supposed to be dry, but this season during June and July dry weather was conspicious by its absence. There were numerous electrical storms accompanied by high winds and frequently by hail, which would have been disastrous to crops had there been any in the vicinity. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. No game was seen, but a few antelopes are reported to roam in the locality.—I. J. Steele, D.L.S., 1909.

- This township is most readily reached from Moosejaw, the nearest railway point, by taking the trail to Willowbunch, thence a settlers' trail to township 3, thence across country. This trail is a good one as far as Willowbunch. The soil is clay loam with a clay subsoil, and should grow good crops, as some very fine oats and barley were grown on similar soil in the township to the north. The surface is level or gently rolling with the exception of the south tier of sections where the ground is very broken. No timber nor scrub of any kind grows here. Wood for fuel may be obtained in township 2, range 29, but the supply is limited and will soon be exhausted. No stone-quarries nor minerals of any description were noticed. A creek bed extends across the northeasterly part of the township. Good fresh water lies in numerous pot-holes during the summer, and there is probably a running stream during the spring freshets. No sloughs of any importance were seen. There are of course no water-powers. Practically no hay can be cut in this township owing to the absence of sloughs and the shortness of the upland grass. The climate is generally supposed to be dry, but this season during June and July it was just the opposite. There were numerous thunder-storms accompanied by high winds and frequently by hail. latter fell only over small areas, although the storm might be general. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. No game was seen.—I. J. Steele, D.L.S., 1909.
- This township is approached by trail from Moosejaw, seventy miles north.

 The soil is sandy loam with dry clay subsoil and adapted to mixed farming. There is no timber of any quantity or quality, but hay is fairly plentiful, and water is to be obtained of good quality. There is no water-power and very few sloughs exist. The climate is dry and bracing, but no summer frosts were experienced. Fuel is obtained from bush convenient to the west of this township. There are no coal veins, stone-quarries nor minerals. Prairie-chickens and ducks are fairly plentiful.—A. F. Martin, D.L.S., 1904.
- (North outline.)—There is a good assortment of poplar, ash, oak and elm in the valley of Big Muddy creek. The soil here is very rich so that heavy crops may be grown, and the grain ripens well. There is a good yield of vegetables.

 —J. McLatchie, D.L.S., 1881.

(Subdivision.)—The surface of this township is generally rolling and is crossed by several ravines. A marsh on the north boundary of section 34 furnishes the only supply of water that is obtainable in the township. The soil is generally a good sandy loam overlying a clay subsoil.—F. E. Brunelle, D.L.S., 1886.

Townships West of the Second Meridian.

Range 28—Continued.

- The southern part of this township is well adapted to farming; the remaining portion is quite cut up by hills and ravines. The soil is a good sandy loam overlying a subsoil of clay, and good water may be obtained in any of the ravines. There are about eighteen settlers, mostly half-breeds, in this township, all of whom have done considerable fencing and erected good buildings.—F. E. Brunelle, D.L.S., 1886.
- This township has considerable good land, especially in the southerly part. The northeasterly part is a good deal broken by a part of Willowbunch lake and by deep ravines and coulées in many places. The soil in the southerly part would be well adapted to farming or ranching as there are some good hay marshes, from which the settlers of Willowbunch get a fair supply of hay. The northerly part is very much broken, and the soil hard and not well adapted to farming. surface is all open prairie, there being no timber of any account, only a few scrubby bushes and small trees in the ravines. The water in many places is alkaline, but there are a few fresh-water sloughs that afford fairly good water. streams of any kind and consequently no mill sites nor water-powers. The climate indications are very favourable and this district does not appear to be subject to summer frosts. There are no fixed rocks in any part, and no sign of coal or lignite, though a species of coal is found in township 5 in the same range. Game is very scarce. there being only a few ducks on the lakes and ponds. There are no indications of minerals of any kind. The water in Willowbunch lake is guite alkaline, and not fit for use, being at all times quite muddy. Taking the township as a whole it would be fairly well adapted to settlement and to the growing of wheat and other grains.— J. Warren, D.L.S., 1905.

This township is approached by trail from Moosejaw, sixty miles north. The soil is sandy loam with clay subsoil suitable for mixed farming. The surface is highly broken, open prairie and there is no timber. Hay of good quality is fairly plentiful. There are numerous sloughs with good water, but no water-power exists in the township. The climate is dry and bracing and there are no summer frosts. Fuel is obtained conveniently from bush to the west. No coal, stone, nor minerals were found. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

The most accessible route to this township is from Moosejaw, about sixty miles northerly on the Canadian Pacific railway. The trail from Moosejaw to Willowbunch, which passes through section 36 of this township, is good in dry weather, but is somewhat hilly for a considerable portion of its length. soil is principally clay, varying from that to sandy clay and clay loam, and should be suitable for growing all the usual cereals and vegetables of the district. It is somewhat stony in the bottoms of the coulées. A long valley through which the Moosejaw and Willowbunch trail runs, extends along the whole length of the east outline and a 'bottom' runs along the north boundaries of sections 34, 33 and 31. Coulées run back from both sides of these "bottoms" into the township to a distance varying from half, a mile to one mile, and these make the eastern and northern portions somewhat broken. Elsewhere the township is mainly gently rolling open prairie. is no timber in this township at all. A few hay meadows are scattered throughout, but very little hay can be cut. The bottom lands along the northern outline would furnish a lot of good hay if cut early in the year. A fresh water slough is to be found on the east boundary of section 13. A spring at the southeast corner of the township and a spring of only slightly alkaline water in the northwest quarter of section 35, form the only bodies of fresh water seen in this township. The north and

RANGE 28—Continued.

south outlines are liable to be flooded to the depth of about two feet or so for a while in the springtime. This is the only land liable to floods. The supply of fresh water at present is permanent though hardly sufficient. No water-power can be generated. The climate is the usual climate of the district, hot days and cool nights. Summer frosts, I believe, do not often occur. During the month of September, when the township was being subdivided, the days were fine and warm and the nights moderately cool. No frost was experienced. There is no fuel in this country, but poplar can be procured in the township to the south. No coal or lignite veins were encountered. No rock in place nor minerals of economic value were seen. A considerable number of ducks, mostly gray, blue and green wing teal and spoonbills, were seen. A few antelopes and geese were also seen. Prairie-chickens and jack-rabbits were very scarce.—H. S. Holcroft, D.L.S., 1906.

(North outline.)—This outline runs through heavily rolling prairie and s. crosses some small marshes. The soil is mostly second-class, consisting of clay and sandy loams overlying white and brown clay subsoils.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is most easily reached by the trail from Moosejaw to Willowbunch, which passes through section 1. Moosejaw is distant about sixty-five miles northerly, and is the nearest railroad point. The Moosejaw-Willowbunch trail is in good condition, but some parts are hilly, which makes travelling difficult after rain. The soil of this township is generally a stiff clay, with patches of sandy clay and gravel. The western range of sections are nearly all of a heavy clay loam. the soil is first-class and should make good agricultural land. This township is entirely open, rolling or hilly prairie. A few hills, about sixty feet high, occur in sections 4, 5, 8, 9, 20 and 21. The remainder of the township is rolling. There is no timber. Small hay meadows containing a heavy growth of wild hay are to be found distributed well over the surface. Lake of the Rivers, or, as it is locally called, "River lake," is the only permanent body of water. This lake cuts off portions of sections 19, 30 and 31, but is too highly alkaline for human consumption. At present fresh water can be secured from a spring in the northeast quarter of section 35, township 7, range 28, but this supply is not sufficient. None of the land is liable to be flooded. Waterpower could not be generated in this township. During the period of subdivision, viz., the second week in September, the weather was warm during the day and cool at night, with a few light frosts and some rain. No fuel exists in this township. The nearest procurable wood is in township 6, in ranges 27, 28 and 29, where there is a quantity of small cottonwood and poplar. No coal or lignite deposits were seen. No stone in place nor any economically valuable minerals were seen. numbers of ducks of various species, a few antelopes and jack-rabbits were the only varieties of game seen.—H. S. Holcroft, D.L.S., 1906.

9. loam soil over a subsoil of light and dark clays which rank as third-class. The northeast half of section 1 ranks as second-class. Two small marshes were crossed in section 12, but none in the remaining sections.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The trail crossing township 11, range 28, is the best one for reaching that part of the township to the west of Lake of the Rivers. The trail running from Moosejaw to Willowbunch passes through the east part of the township. The soil is all clay but only the east halves of sections 29 and 32, the whole of sections 28 and 33 and the south halves of sections 2, 3 and 4 are suitable for farming. The remainder of the

Range 28—Continued.

township is rolling and hilly and is more suitable for grazing. There is some scrub in coulées running back from the lake in sections 6 and 7. There are no sloughs suitable for hay, and the upland grass is short and not very thick on the ground. The water in Lake of the Rivers is slightly alkaline but there is a good fresh-water slough in section 1, a fresh-water spring in section 15, and also smaller springs along the lake shore in sections 23 and 35. Wood and coal for fuel can be procured at Willowbunch. There are no lignite nor coal veins in the township and no stone-quarries nor minerals of economic value. Small game, such as chickens, rabbits and foxes, was quite plentiful to the west of the lake, and there were large flocks of ducks, geese and pelicans on the lake at the time of survey (October). No antelopes were seen but this is probably due to the fact that the grass had been burned by a prairie fire just previous to the time of survey.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is heavily rolling prairie; the 10. ridges range from ten to forty feet in height. The soil is a sandy loam over a subsoil of light and dark clay with some gravel, and ranks as third-class.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The trail from Moosejaw to Willowbunch runs through that part of the township to the east of Lake of the Rivers. The westerly part of the township is more easily reached from the Wood Mountain trail, in township 11, range 29. The soil to the east of the lake is mostly a sandy loam and, being very rolling, is best adapted to grazing. The soil to the west is a heavy clay, and though in most parts the country is rolling, it could be mostly brought under cultivation. There is a little willow scrub along the lake shore in sections 3, 9 and 16. There is some good hay land around a slough in section 6. There are good springs near the lake shore in sections 33 and 16, and there are also several springs on the east side of the lake in section 36. There are no fresh-water sloughs and no creeks. Some frosts occurred during the survey of the township (September and October). There is a two-foot lignite vein in section 36, but it was impossible to tell what the quality of the coal was, as the surface was badly weathered out. There are no stone-quarries nor minerals of economic value. Small game is quite plentiful, especially in the rougher parts along the lake, there being chickens, rabbits and foxes. Geese, ducks and pelicans are found in large flocks on the lake. Several large herds of antelopes were seen during the survey.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is heavily and unevenly rolling 11. prairie; the elevations range from fifteen to thirty feet high. The soil is sandy and peat loam over a subsoil of black and white clays and gravel, ranking as third-class. The northeast half of section 24 ranks as second-class. The banks of the Lake of the Rivers extend into section 12, and rise to a height of from thirty to forty feet.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—There is a good trail crossing the northeast of the township, which is the best way for reaching the easterly portion of the township. The portion of the township to the west and south of Lake of the Rivers is more easily reached from the Wood Mountain trail passing through township 11, range 29. The soil is largely clay, but in the more rolling parts and adjacent to the lake there is considerable gravel. The township as a whole is best adapted to grazing, although there are a few sections suitable for farming. There are a few small bunches of willow scrub along the east shore of the lake. The water in the lake is slightly alkaline, but there are some good fresh-water springs along the shore. There was no water in the sloughs at the time of survey. (September). There were no indications of severe frosts at the time of survey.

Range 28—Continued.

Willowbunch is the nearest point where one can get coal and wood for fuel. There are no coal nor lignite veins in the township. There are no stone-quarries and no minerals of economic value are known. Game is very plentiful. Large flocks of geese, ducks and pelicans are found on the lake and foxes, coyotes, rabbits and badgers are found in the hills around the lake. Several herds of antelopes were seen in the township.—C. M. Teasdale, D.L.S., 1906.

(North outline.)—The surface along this line is very hilly prairie with a soil 12. of clay and sandy loams, and gravel and stone in ridges, ranking as first-and second-class. Occasional ponds of fresh and salt water occur and there is a large saline lake in the northeast half of section 36. The northwest half of section 32 and the whole of sections 31, 30 and 19 are submerged by Johnston lake.—A. C. Webb, D.L.S., 1881.

(East outline.)—The surface along this line is hilly prairie and has a soil of clay and sandy loam with gravelly and stony ridges; ranking as first and second-class.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is high, dry and sandy, and unfit for agriculture. The northwestern part is broken by an alkaline lake, the bottom of which is covered with salt deposit. The swamps are few and most of them were dry at the me of survey. The shores of Johnston lake which covers the northwest corner are very sandy and unfit for cultivation for half a mile inland.—C. F. Leclerc, D.L.S., 1883.

The best route to these townships is from Expanse, a station on a 12 to 14. branch of the Canadian Pacific railway, in township 12, range 29. They can also be reached from Mortlach station on the main line of the Canadian Pacific railway. A part of Johnston lake which has dried up since it was first surveyed, consists of a more or less swampy or muddy flat on which grows long grass or hay of second quality and having an alkaline taste. During the spring the lake was higher than usual. Sometimes in the fall there is a flat of soft mud, half a mile in extent. The water exposed at the northern part of the lake is fit for cattle in the spring. The country adjoining Johnston lake is best suited for ranching as the soil consists of sandy loam on which grows plenty of good long grass. Good water may be easily obtained at a small depth anywhere near the lake. The only fuel obtainable is coal which has to be brought from the railroad stations. Ducks and geese are plentiful and a few swans are seen on Johnston lake. On the prairie some prairie-chickens and coyotes are to be seen.—C. Rinfret, D.L.S., 1912.

(North and east outlines.)—The surface along these lines is very hilly with occasional swamps and ponds. A lake, about eight chains wide, containing good, fresh, deep water is situated in the northeast half of section 36. There is gravel and stone in the ridges. The soil is clay and sandy loam and ranks as second-class on the east and first-class and second-class on the north. A cart trail from Qu'Appelle to Wood Mountain, crosses section 24.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in this township is generally of poor quality, and suitable only for pasture. It is very rough and hilly. There is an abundance of good water to be had at all seasons. There are a few willows on the east shore of Johnston lake which submerges the western boundary.—H. Kerr, D.L.S., 1882.

Range 28.—Concluded.

(North and east outlines.)—The surface along these lines is entirely in hilly and rolling country, with numerous ponds and sloughs and the tops of hills stony. The soil is a light clay, approaching a sand loam on the west, and gravelly and stony in the east. From section 33 the township falls gently to the west. —F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township is of a similar character to township 13. The Cactus hills cross the northeast corner. The surface is very broken and hilly.—H. Kerr, D.L.S., 1882.

(North outline.)—The surface along this line from sections 36 to 34 lies along the flank of the Coteau hills. The soil is a light clay loam and ranks as third-class. Ponds and sloughs are numerous, and the tops of the hills stony.—

F. W. Wilkins, D.T.S., 1882.

(East outline.)—The surface along this line from sections 1 to 24 is in rolling hills with numerous sloughs. The tops of the hills are stony. The soil is a fine clay loam approaching a sandy loam and ranks as third-class. Sections 25 and 36 are on the escarpment of the Coteau.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township lies in the Cactus hills and is suitable only for grazing. The soil is generally clay. There are numerous marshes and sloughs, generally slightly impregnated with alkali, throughout the township.—J. A. McMillan, D.L.S., 1882.

(North outline.)—The surface along this outline is generally rolling prairie, but sections 32, 33, 34 and 35 are broken considerably by ravines. The soil is a hard clay and ranks as second-class. Water is scarce but there is probably sufficient moisture for grain growing.—W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is open, gently undulating prairie with a few marshes at the south. The soil through sections 1, 12, 13 and 24 is a gravelly loam over a gravelly subsoil and ranks as third-class. In sections 25 and 36 there is a clay soil which may be rated as first-class.—F. W. Wilkins, D.T.S., 1882.

(Subdivision.)—The land in this township is very rough and broken by the Missouri Coteau on the south and west sides. The soil generally is of a very fair quality for agricultural purposes. There are but few marshes, except in the hilly portion.—
J. A. McMillan, D.L.S., 1882.

RANGE 29.

1. point, by taking the Willowbunch trail as far as the west end of Willowbunch lake, thence a settler's trail as far as township 2, thence across country. This trail is a good one most of the distance. The soil in general is a clay loam with a clay subsoil, but there is considerable gravel in places and some alkali in the creek flats. The soil would probably grow crops, but not much of the township is sufficiently level. It is badly broken up by ravines particularly in the northerly and easterly parts. No timber whatever is found here, but a very little scrub grows in some ravines near the north boundary. Wood for fuel, can be obtained in townships 2, ranges 29 and 30, but the supply will soon be exhausted. Some indications of lignite were seen but not in well-defined seams. No other minerals were noticed. A rather loose shale outcrops in some of the ravines, but it is of no economic

Range 29—Continued.

value. A stream of good fresh water about six feet wide and one foot deep flows across the south part of the township. Another smaller one, rather alkaline, crosses the northeast corner. Probably neither of these ever goes dry, but they are too small for water-power. There are no hay sloughs but a limited quantity of hay can be cut in the creek flats. The climate is generally supposed to be dry, but this season during June and July thunder-storms followed one another in quick succession, frequently accompanied by high winds and hail. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. Ducks and grouse were the only game seen but a few antelopes are reported to roam in the vicinity.—I. J. Steele, D.L.S., 1909.

- This township is most readily reached from Moosejaw, the nearest railway point, by taking the Willowbunch trail as far as the west end of Willow-2. bunch lake, thence a settlers' trail entering the north side of the township. This trail is a good one except in the spring. In most places the soil is a clay loam with a clay subsoil, but in spots there is considerable gravel while the creek beds are alkaline. Very little of this township is fit for anything but grazing owing to the extremely hilly nature of the country. About 3,000 sheep are pastured here. There is no timber whatever but a small quantity of scrub grows in some of the ravines in the west part of the township. Wood for fuel may be obtained in township 2, range 30, but the supply is limited and will soon be exhausted. No lignite or other minerals were noticed nor were any stone-quarries seen. A very small stream, rather alkaline, flows across the south part of the township. As it is fed by springs it probably never goes dry but it is much too small for any water-powers. No other water is to be had. There are no hay sloughs but a lot of hay can be cut in the flats of the creek. The climate has the reputation of being dry, but this season it was just the reverse, during June and July there being a continuous succession of thunder-storms frequently accompanied by high winds and hail. August was as dry as any one could wish. No frost occurred between May 24 and August 27. A few ducks and grouse were the only game seen.—I. J. Steele, D.L.S., 1909.
- This township is most readily reached from Moosejaw, the nearest railway 3. point, by taking the Willowbunch trail as far as the west end of Willowbunch lake, thence a settlers' trail which enters section 24. The soil is a clay loam with a clay subsoil, but there is considerable alkali in places. It should be suitable for grain growing as very fine oats and barley were grown on similar soil in the township to the east. Most of the township is gently rolling with the exception of the southwest corner which is rather hilly. No timber nor scrub whatever grows in this township, but wood for fuel can be obtained in township 2, range 30. The supply is rather limited, however, and will soon be exhausted. No lignite nor other minerals were noticed, nor were any stone-quarries seen. Fife lake covers several square miles of this township; the water is slightly alkaline, but is good enough for stock. There are two other small alkaline lakes and one of fresh water. There are also a few large fresh-water sloughs. There are no streams and consequently no water-powers. Hay may be had in abundance as the upland grass in many places grows sufficiently long to cut. The climate is generally supposed to be dry, but this season throughout June and July the weather was just the opposite. There were numerous severe electrical storms, frequently accompanied by high winds and hail. The month of August was as dry as any one could wish. No frosts occurred between May 24 and August 27. Numerous ducks, geese and pelicans were seen.—I. J. Steele, D.L.S., 1909.

Range 29—Continued.

This township is approached by trail from Moosejaw, which is seventy-two 4. miles north. The soil is sandy loam, some black loam with clay and gravelly subsoil. The surface is highly rolling, broken prairie suitable for mixed farming. There is no timber. Hay is of good quality and plentiful. There is a large lake and numerous sloughs with good water. No water-powers exist in this township. The climate is dry and bracing, but no summer frosts were experienced. Fuel is obtained from the bush to the west. No coal, exposed rock nor minerals were found. Prairie-chickens and ducks are plentiful.—A. F. Martin, D.L.S., 1904.

This township is gently undulating to hilly. Some parts are very hilly and the surface all open prairie. The soil is generally loam and in many places very hard, yet if it was broken up it might yield good wheat or other grain. There is no timber in the township. There are some good hay lands situated in the western and northwestern portions. A good deal of hay is cut by the settlers at Willowbunch. The water in the ponds and lakes is generally good, but there is a part of a lake in sections 2, 3, 10 and 11 that is quite alkaline. Some of the ponds and lakes appear to be permanent. There are no streams and consequently no water-powers in any part of the township. The climate appears to be good and there are apparently no summer frosts. no fuel of any kind, nor any indications of coal or lignite, minerals nor any fixed rock. The only game is ducks, of which there are a great many on some of the ponds. Taking the township as a whole it might be fairly well adapted to settling as it is easily reached by trail from Willowbunch, and the land might yield well when broken up. Rain seems to be scarce, which fact accounts for the general surface being dry and hard. There is a part of a lake in the southerly portion and one in the central that have to be traversed.—J. Warren, D.L.S., 1905.

5. north. The soil is chiefly sandy loam with clay and gravelly subsoil, and is adapted to mixed farming. No timber of any quantity or quality exists, but there is some small poplar up to three inches in diameter and some ash. Hay of good quality is plentiful. There are numerous sloughs and springs with good clear water. The surface is very broken, rolling prairie, which is scrubby and alkaline in parts. There is no water-power. The climate is dry and bracing, and there are no summer frosts. Poplar, for fuel, may be obtained conveniently. No coal veins, exposed rock nor minerals were noticed. There are three houses in section 36. Prairie-chickens and ducks are fairly plentiful.—A. F. Martin, D.L.S., 1904.

This township on the whole is a fairly good one, as there are many sections of very good soil, which would be suitable for farming purposes; also there are some good ranching lands. The whole of the township is open rolling prairie. good hay marshes from which some hay can be cut, but the quantity is limited. water generally is fresh, there being little alkali among the ponds. streams of any kind and consequently there are no mill sites nor water-powers. Fuel is scarce, there being none in the township, but there are some indications of coal to be found in the adjoining township to the east. Game is scarce, there being only a few ducks on the ponds. There is a good trail running through the township from Willowbunch to Wood mountain, over which route the mail is carried. This township if once broken up would make fairly good land for settlement or for ranching, there being some ponds that hold water all the season. The climate seems to be favourable, and does not appear to be subject to summer frosts. In the adjoining township to the east there are some settlers and ranchers who have very fine gardens, growing potatoes and other vegetables with good success.—J. Warren, D.L.S., 1905.

Range 29—Continued.

- 6. from Regina to Wood mountain to the northeast corner of township 6, range 27, thence westerly. This trail was in excellent condition. The soil in the two north tiers of sections of the township is good and well suited for agricultural purposes. The soil surrounding Montague lake is alkaline and stony and fit only for grazing. South of the lake the land is very hilly and broken and is also grazing land. The surface is prairie except a little scrub and small poplar which occur in the ravines along the south side of the lake. No timber is found. Fresh water was found at the time of survey (July) in the marshes and sloughs. A creek drains Montague lake to the southeast; it is twenty links wide and two feet deep near the lake, and at the time of survey was flowing very sluggishly between well defined banks. The land is not liable to flooding and no water-powers were found. The climate is moderate, with no summer frosts. A small amount of firewood is obtained in the ravines along the south side of Montague lake. No stone-quarries nor minerals were found. Duck was the only game seen.—J. L. R. Parsons, D.L.S., 1907.
- The trail from Moosejaw to Willowbunch passes about six miles to the east of this township and affords the easiest means of access to it. The Moosejaw and Willowbunch trail is good, but is somewhat hilly in places. The soil is clay or clay loam or sandy clay. It is somewhat light in places but should produce good crops of wheat and other cereals as well as all varieties of the vegetables of the province. Parts of sections 24, 25, 26, 35 and 36 are somewhat broken by coulées and hills. remainder of the township is open rolling prairie. No timber at all exists. tons of wild hay could be cut in the southwestern portion, but excellent grazing exists all over the township. A small creek bed in the north of sections 34, 35 and 36 collects and holds rain and snow water, but in a very dry season this water becomes alkaline and not fit for human consumption. A shallow lake in the southern portions of sections 1 and 2 contains water, which though alkaline may be used. Beyond some few hay meadows which hold rain water for a short while, no water exists. of water is not sufficient or permanent. The climate is good. Summer frosts, I believe, are rare. There is no fuel in this township, but poplar may be procured in a large "bottom" or valley about four miles southward in townships 6; ranges 29 and 30. No stone in place, minerals of economic value nor coal or lignite veins were seen. fair number of ducks was seen, also some antelopes and jack-rabbits. Coyotes, red foxes, and kit foxes were plentiful. Other game was scarce.—H. S. Holcroft, D.L.S., 1906.
- (North outline.)—The country along this line is rolling prairie with some scattered marshes. The soil is of second-class and third-class quality, it being clay and sandy loams overlying subsoils of brown, dark and white clays, with some gravel. The surface is stony in places.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The nearest railway station to this township is Moosejaw. The trail from Moosejaw to Willowbunch is at present the best route to follow in reaching this township. This trail must be left in section 1 of township 8, range 28, where a wagon road leaves the main trail and goes westerly through a valley which ends at the south of the Lake of the Rivers. This is a long narrow crooked lake with strongly alkaline water which occupies most of the two eastern ranges of sections. This trail is in good condition in dry weather, but would be heavy when wet. All this township except the part adjoining the lake has a clay loam with sandy loam and sandy clay in some places. This township is very suitable for agricultural purposes as the soil is good and the surface partly rolling. The land to the east adjoining the lake is

Range 29—Continued.

broken by coulées which run back from the lake and the soil is rather stony and gravelly. About thirty squatters' shacks are set up in this township, mostly congregated about the centre. There is no timber nor scrub in this township and only a very little hay could be cut. In the northern portion there are a few small haymeadows on which grows a light crop of poor hay. Excellent upland grass for grazing purposes is to be had all over the township. There is no fresh water in the township, although in a valley in the southeastern portion there is a creek bed which collects the rain water, but this soon becomes alkaline. The water in the Lake of the Rivers is intensely alkaline. This lake is considerably lower than the rest of the township and is surrounded by high banks which are much broken by deep and long coulées. The lake is shallow and in many places contains a growth of rank grass. No waterpower could be developed. No coal nor lignite veins are known to exist. Fuel in the shape of small poplar can be procured in township 6, range 29, about fifteen miles southerly. No stone nor minerals of economic value were seen. There are a few antelopes, ducks and jack-rabbits. Prairie-chickens are scarce. The small game is largely destroyed by the great number of hawks, coyotes and foxes which are found all over the township. An occasional sand-hill crane or a pelican may be seen.-H. S. Holcroft, D.L.S., 1906.

(East outline.)—The surface along this line is rolling and hilly. The soil gonsists of clay loam overlying a clay subsoil and may be rated as second-class and third-class. Lake of the Rivers crosses the southeast corner of section 1. Its banks are high and steep. There are a few marshes in the northeasterly part.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is most easily reached from the trail in township 11, range 29. The soil is principally clay, and is mostly suitable for farming. Sections 35, 36, 25, 26 and 24 are hilly and best adapted to grazing. Large quantities of slough hay could be cut around the large slough in sections 26, 27, 33 and 34. Upland hay could be cut in the southwesterly part of the township, as the land is lighter and the grass much heavier than in the rest of the township. There is water in the slough in sections 33 and 34, and also in a small slough in section 26. There are no coal nor lignite veins in the township, but there is both coal and wood at Wood mountain, in township 4, range 3, west of the third meridian. There are no stone-quarries nor minerals of economic value. There are a few antelopes, chickens and ducks in the township.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is broken by hills averaging from 10. fifteen to forty feet in height. The soil is a sandy loam with a sand or clay subsoil and ranks as second-class and third-class. A large alkaline slough occupies a considerable portion of the southeast half of section 12. There are a few marshes.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is reached from Moosejaw by the trail passing through township 11, range 29. The soil is mostly clay or clay loam, but is generally too rolling to make good farming land. Sections 36, 7, 8, 9, 16, 17 and 18 are hilly and gravelly, and suitable only for grazing. The surface is all prairie. There is a large slough in sections 31 and 32, which was partly dry at time of survey (October), and would be good hay land. There is a smaller slough in section 3, parts of which could be cut for hay. Besides these there are numerous small sloughs all over the township suitable for hay. The upland hay is very short. There is fresh water in several sloughs. Besides the sloughs in sections 3, 31 and 32, there is water in sloughs

Range 29—Continued.

in sections 7 and 8, and a good spring near the quarter section on the north boundary of section 19. Both coal and wood can be had at Wood mountain, in township 4, range 3, west of the third meridian, but there are no coal nor lignite veins in the township. There are no stone-quarries nor minerals of economic value in the township. Antelopes, chickens and ducks are quite plentiful.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is very hilly prairie with a large quantity of stone and gravel on the ridges. The soil is a clay and sandy loam ranking as first-class and second-class. The southeast half of section 25 is broken by the valley of a creek, the banks of which are about forty feet high. The water of this stream was alkaline and at the time of survey was found only in pools.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The trail from Moosejaw to Wood mountain crosses the township in a southwesterly direction, entering in section 35 and leaving it in section 18. The northerly two tiers and the easterly tier of sections are inclined to be gravelly, but the remainder of the township is clay and clay loam. The northerly and easterly portions of the township are suitable only for grazing, while in the remainder there is some good farming land. It is open, rolling prairie, without any scrub or timber at all. There are no large hay meadows in the township, although there are a few small sloughs suitable for hay. Water is not plentiful, and at the time of survey (August) there was good water in a slough in section 23. There is a spring in section 27 on the trail. There are no permanent creeks, but in the spring there is water in the valley in sections 33, 34, 26 and 25, and in some places there is a distinct bed. Vegetation showed no signs of frost at time of survey. Coal is mined at Wood mountain, and wood can also be obtained there. There are no coal nor lignite veins known in the township. There are no stone-quarries nor economic minerals. Game is fairly plentiful. Several herds of antelopes were seen during the survey. Chickens are quite plentiful in the rougher parts. There are large numbers of foxes and badgers.—C. M. Teasdale, D.L.S., 1906.

12. (North outline.)—The surface along this line is submerged by Johnston lake.
—A. O. Wheeler, D.L.S., 1883.

(*East outline*.)—The surface along this line in sections 1, 12 and 13 is rolling, hilly or level prairie interspersed with a few marshes. The soil is clay and sandy loam with gravel and stone. It ranks as first-class, second-class and third-class. About two-thirds of section 24 and the whole of sections 25 and 36 are submerged by Johnston lake.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—The land in the northern half of this township is nearly all submerged by Johnston lake. Some sections are fit for cultivation but the soil is generally very sandy and dry. The soil ranks as second-class and third-class. There is a spring of fresh water in section 20. About half of the land around Johnston lake is unfit for cultivation.—C. F. Leclerc, D.L.S., 1883.

- 13. (See report for township 12, range 28, west of the second meridian).—C. Rinfret, D.L.S., 1912.
- A survey was made of two islands lying in Johnston lake. The larger island, Isle of Bays, with 200 acres, approximate area, lies in sections 28, 29 and 33, township 13, range 29. The shore of the island is generally firm as the soil is very stony. It is of little agricultural value. The small

Range 29—Continued.

island, Sand Bar island, is found in section 5, township 14, and section 32, township 13, range 29. It is only a sand bar and during high winds the water probably washes right over it. Its area is about two acres and has no value agriculturally. Although Johnston lake is shallow and alkaline, it is noted for the numerous flocks of ducks, geese and swans which frequent it during the spring and fall. As these islands are near the centre of the lake they make an excellent resort for hunters. Their value lies, therefore, in their situation as shooting grounds.—G. A. Bennett, D.L.S., 1911.

(North outline.)—The surface along this line is hilly and broken, with a gravelly clay and sandy loam soil which ranks as second-class and third-class. Ponds and sloughs are numerous. About one-third of this township is occupied by Johnson lake, along the shore of which there is a large alkaline marsh of from half a mile to a mile in width.—J. Dudderidge, D.L.S., 1882.

(East outline.)—The surface along this line is rolling and hilly prairie with frequent swamps and ponds some of the latter containing water four feet deep. The soil is sandy and clay loam with some gravel on the ridges, and ranks as first-class, second-class and third-class.—A. C. Webb, D.L.S., 1881.

(Subdivision.)—This township is unfit for agriculture but as the surface is very undulating and swampy it offers every advantage for grazing. The water in the swamps is generally good but there are low-lying places where the water is alkaline. Grass is plentiful. The soil is a sandy loam over a sand subsoil and ranks as fourth-class.—C. F. Leclerc, D.L.S., 1883.

The best way to reach this township is by good trails from Mortlach a town on the main line of the Canadian Pacific railway about twenty miles to the north. soil consists mostly of clay loam getting heavier in the northeastern part. Some gravel and loose stones are found in places. Only the central third is adapted to farming, wheat, oats and flax being the main products. This part is undulating. The climate is good and there is sufficient moisture for the maturing of grain. The southern part has a lighter soil and a strip of land ten or twelve chains wide adjoining Johnston lake is liable to be flooded in the spring or when a strong southerly wind blows. The northern part is very rolling, has numerous sloughs, and is a good ranching district. Hay and long prairie grass can be cut on nearly every section being very abundant around the sloughs. Long alkaline grass grows near Johnson lake, but as the shore is soft in places, the farmers do not cut it. Wells furnish an abundant supply of fresh water. There is a stream of good water running through sections 1 and 12. There are no water-powers, nor minerals of value. The only fuel available is coal which can be obtained from Mortlach. Along the sloughs and on Johnston lake numerous ducks, geese and a few swans were seen. Some prairie-chickens and rabbits were also noticed.—C. Rinfret, D.L.S., 1912.

(Partial.)—The surface of this township is rolling in the northerly part and nearly level around Johnston lake. The soil is a sandy loam and is well adapted to the producing of flax, wheat or oats. There is no wood nor coal in the township, the settlers depending on the railway for fuel. There is sufficient hay in the marshes for the use of the settlers. The trails are good and lead to the various towns on the Canadian Pacific railway. Most of the settlers trade at Mortlach, a station on the main line of the Canadian Pacific railway. The water in the sloughs is alkaline, but good water may be obtained by digging to a depth of from twenty to one hundred feet. The land is all occupied and some of the settlers have a good deal of their land under cultivation.—W. J. Deans, D.L.S., 1913.

RANGE 29—Concluded.

(North outline.)—The surface along this line is hilly and broken prairie, with a few ponds of good water. The soil consists of clay and gravel overlying subsoils of clay loam and gravel and may be rated as second-class.

—J. Dudderidge, D.L.S., 1882.

(East outline.)—The land along this line is situated on the Missouri coteau and is occupied by cone-shaped hills, ponds and small lakes.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is rough and unfit for farming but it is well adapted to grazing purposes. The soil is good but there are a number of sloughs containing slightly alkaline water.—J. A. McMillan, D.L.S., 1882.

(North outline.)—The land along this line is rough and broken and contains a number of boulders and considerable gravel. It may be rated as third-class. W. Pearce, D.L.S., 1881.

(East outline.)—The surface along this line is situated on the Missouri coteau, and is occupied by cone-shaped hills with ponds and small lakes. The soil is very stony and may be rated as third-class.—W. Pearce, D.L.S., 1881.

(Subdivision.)—The land in this township is suitable for grazing purposes. There are numerous alkaline sloughs and marshes. The soil in the extreme north is sandy, but in the remainder of the township it is very good, being clay loam overlying a clay subsoil, and ranks as third-class and fourth-class.—J. A. McMillan, D.L.S., 1882.

Range 30.

- This township is most readily reached from Moosejaw, the nearest railway point, by taking the Willowbunch trail as far as the west end of Willow-1. bunch lake, thence a settlers' trail to township 2, range 29, thence across country. This trail is a good one most of the way. The soil is mostly a clay loam with a clay subsoil, but in many places there is considerable gravel. There are also wide alkaline flats along a creek. The soil in places might be suitable for crop raising, but the township as a whole is rather hilly. However there is excellent grazing. No timber nor scrub of any description grows here, but wood for fuel may be obtained in township 2. The supply is limited, however, and will soon be exhausted. No lignite nor other minerals were seen nor were any stone-quarries noticed. A small stream of fairly fresh water flows diagonally across the township. This is the only water to be found. There are no water-powers. Hay is not very plentiful, but a limited quantity might be cut along the creek and in some of the tributary valleys. The climate is generally supposed to be dry, but this season during June and July it was just the There were numerous thunder-storms, frequently accompanied by high winds and hail. The month of August was as dry as any one could wish. No frost occurred between May 24 and August 27. Ducks were the only game seen, but a few antelopes are reported to roam in the vicinity.—I. J. Steele, D.L.S., 1909.
- This township is most readily reached from Moosejaw, the nearest railway point, by taking the Willowbunch trail as far as the west end of Willowbunch lake, thence a settlers' trail to section 36. This trail is a good one except in the spring. The soil is mostly a clay loam with a clay subsoil, but there is considerable gravel in places. It should grow good crops wherever the surface is sufficiently level, but most of the township is much too hilly, particularly in the northerly part.

RANGE 30—Continued.

It should make excellent grazing country. There are a number of ranchers in this locality already who have been very successful. A deep valley extends across the northeasterly part of the township and along its banks there are several good springs. There is also a small creek of fresh water in section 6. This constitutes the supply of water. Although limited in quantity it is fairly permanent. There are, of course, no water-powers. A large quantity of hay may be cut in the above mentioned valley, but nowhere else in the township, as the upland grass does not grow sufficiently No timber of any size is to be had, but considerable scrub grows in the ravines in the north part of the township. The settlers for miles around use it for fuel and fencing, and the supply will soon be exhausted. Some traces of lignite were seen, but no well defined seams. However, seams probably underlie the township, as it is found only a mile or two farther north. No other minerals nor stonequarries were seen. The climate is generally supposed to be dry, but this season during June and July it was just the reverse. There were numerous thunder-storms accompanied by high winds and frequently by hail. Some of the crops in the district were practically destroyed. August was as dry as any one could wish. No frost occurred between May 24 and August 27. A few ducks and grouse were the only game seen.—I. J. Steele, D.L.S., 1909.

- This township is most readily reached from Moosejaw, the nearest railway point, by taking the Willowbunch trail as far as the west end of Willowbunch lake, thence a settlers' trail around the west end of Fife lake. This trail is good except in wet weather. The soil is mostly a clay loam with a clay subsoil, but there is some gravel in places and most of the low ground is alkaline. Where not alkaline the soil in the valleys grows good crops. The township as a whole is much too hilly for farming, but it is excellent for grazing and very little hay is required for winter feeding. Fife lake extends into the northeast corner of the township. It is slightly alkaline, but is good for stock. There are also numerous fresh-water springs in the valleys, so that this township is exceptionally well watered, although there are no water-powers. There is no timber of any size, but considerable scrub grows in the southwest corner of the township in the ravines, which can be used for fuel. The supply will not last long, however, as all the settlers in the district get fuel there. Indications of lignite were seen, and one of the ranchers has opened up a seam in the vicinity of section 9, where he obtains enough for his own use. No other minerals nor stone-quarries were seen. The climate is generally supposed to be dry, but this summer during June and July dry weather was conspicuous by its absence. There was a succession of electrical storms, accompanied by high winds and sometimes by hail. The rainfall during these storms was exceptionally heavy, dry creek beds being frequently flooded until they were impassable for a day or so. Throughout August, however, there was practically no rainfall. No frost occurred between May 24 and August 27. Ducks, geese and pelicans were the only game seen.—I. J. Steele, D.L.S., 1909.
- This township was reached from township 5, range 1, by travelling southeast to Spring Creek ranch in section 13, township 5; thence by the ranchers' trail to the telegraph line trail which crosses the south part of township 5, range 30. The soil is light and gravelly in many places and is best suited for grazing purposes. The surface is everywhere prairie. The east two-thirds of the township is hilly and rough while the west one-third is rolling. There is no timber. Good marsh hay is abundant in the numerous small hay marshes throughout the township and in the valley of Hay Meadow creek, which flows easterly through the south tier of sec-

Range 30—Continued.

tions. Fresh water was easily obtained at the time of survey (August) in the marshes and sloughs and in Hay Meadow creek. No water-powers exist nor is the land liable to be flooded. The climate is moderate, with no frosts at the time of survey. No fuel occurs in the township, but a limited amount exists in the township immediately north. No stone-quarries nor minerals were found. Ducks were the only game.—J. L. R. Parsons, D.L.S, 1907.

- This township was reached from township 9, range 25, by following the police 5. trail from Regina to Wood mountain. It was in good condition. The soil is light in quality, and on account of the broken nature of the surface is suited only for grazing purposes. The surface is rolling and hilly prairie, with no timber, broken on the north and west sides of the township by deep ravines in which small bluffs of poplar and willow occur. Hay of good quality is to be found in the small hay marshes in the township. Fresh water occurs in the marshes and in the two creeks. One creek runs northerly through the west (fractional) tier of sections; it is ten links wide and one foot deep and has a current of one and one-half miles per hour. The other joins this one from the east, draining a deep ravine in sections 35, 34 and 33. It is six links wide and one foot deep and has a current of one and one-half miles per hour. There is no water-power. The climate is moderate, with no frosts at the time of survey (July). Fuel consists of small poplar and willow occurring in the ravines along the north and west sides of the township. There is said to be lignite coal in all the hills, but none, however, was seen. There are no stone-quarries nor minerals. Ducks were the only game.—J. L. R. Parsons, D.L.S., 1907.
- (East outline.)—The trail from Wood mountain to Willowbunch crosses the east boundary of section 12 in this township and forms the easiest way to reach the township. The soil is mainly clay, being somewhat stony in places. It would probably grow good wheat and the usual cereals of the district. A large bottom, or valley, about one and one-half miles wide along which the Willowbunch and Wood mountain trail runs, enters the township on the east boundaries of sections 1 and 12 and passes southwesterly through the southerly portion of the township. This valley is level and contains a large quantity of good hay. The soil here is a heavy clay. This valley also contains a considerable amount of poplar up to three inches in diameter. The remainder of the township appears to be open rolling prairie, being somewhat rough in places and would make excellent grazing country. Several hay meadows are scattered throughout the township. The valley mentioned above contains several good springs of fresh water, which are permanent and would give a good supply of water. This bottom is flooded in spring time for a while. No water-powers exist. During the month of September while this boundary was being run the climate was very mild, and only one light frost occurred. Fuel in the shape of poplar can be procured all along the Willowbunch valley in the southerly part of the township. No coal or lignite veins, bed rock, nor economically valuable minerals were encountered. Antelopes, ducks of various kinds, and geese were plentiful. A few prairie-chickens and jack-rabbits were seen. Other game appeared to be scarce.—H. S. Holcroft, D.L.S., 1906.

(Subdivision.)—This township was reached from township 6, range 29. The soil is of good quality, suitable for agricultural purposes. The surface is level and rolling prairie with no timber. Good hay is found in the small hay marshes in the township. Water was plentiful at the time of survey (July) in the small marshes. There is no water-power in the township. There is no fuel but some wood can be obtained in township 5, range 30. No stone-quarries nor minerals were found. The only game was ducks.—J. L. R. Parsons, D.L.S., 1907.

Range 30—Continued.

- The nearest trail to this township is the trail from Willowbunch to Wood mountain, which passes through township 6, in range 30. The greater part of the soil of this fractional township consists of a loam mixed with clay and sometimes with sand, and should be capable of producing good crops of all the usual cereals and vegetables of the province. The township is open rolling prairie with only a small quantity of good hay growing in some small hay marshes scattered throughout the township. Two hay marshes of considerable size are located on the east boundaries of sections 12 and 13 respectively. Water of a fair quality is found in a shallow marshy lake in the northeast portion of the township. This supply is sufficient and permanent. No water-powers exist here. The climate is the usual climate of the district, moderately equable. During the time this township was subdivided, viz., the first week in October, some frosts occurred, but otherwise the weather was pleasant. There is no fuel in this township, but fuel consisting of poplar could be procured in a valley about four miles to the south. No veins of lignite or coal were seen. There is no rock in place and no economically valuable minerals were discovered. A good many ducks and geese were seen, also a few sandhill cranes, swans and pelicans. Prairie-chickens and jack-rabbits were scarce. An occasional antelope was seen and coyotes and foxes were plentiful.—H. S. Holcroft, D.L.S., 1906.
 - (North outline.)—This line runs through rolling prairie which is devoid of water. The soil is clay and sandy loams with white and brown clay subsoils, and is of second-class quality.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The trail from Moosejaw to Willowbunch passes twelve miles to the east of this township. In section 1, township 8, range 28, a well-beaten trail leaves the Moosejaw and Willowbunch trail and goes westward to this township. These trails are good but parts of them are liable to be flooded in spring time. The soil is clay loam or sandy clay; it is a little light in places but should produce good crops of wheat and other cereals and all the usual vegetables of the Northwest. The surface of this fractional township is almost all level country. No timber at all is found. A small amount of hay could be cut from some small hay meadows in the northwestern portion of the township. In spring.time some of the depressions in the surface contain water, but during a dry season water cannot be found. None of the land is liable to be flooded except for a short time in the spring. No water-power could be developed. The climate is good in summer time, there being hot days and cold nights. Summer frosts are rare. There is no fuel to be obtained in this township, but some small poplar can be procured in a valley about ten miles to the south. There are no coal or lignite veins and no bed rock. No minerals of economic value were seen. Some antelopes and jack-rabbits were seen. Prairie-chickens are very scarce on account of the great number of hawks that abound. Coyotes and foxes were numerous.—H. S. Holcroft, D.L.S., 1906.

(East outline.)—The surface along this line is rolling prairie with a sandy loam soil overlying a clay subsoil with gravel in places. A few marshes were seen.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is reached from Moosejaw by the Wood Mountain trail, which passes through township 11, range 30. The soil in the north part is a heavy clay, which turns to a clay loam in the south part. The portion north and west of sections 15, 23 and 25 is open rolling prairie and more suitable for grazing, while the part to the south is more level and suitable for farming. There are some sloughs in

RANGE 30—Continued.

sections 9 and 10 suitable for hay. There is a clear fresh-water lake in section 22. Wood mountain, in township 4, range 3, is the nearest point at which wood and coal is obtainable at present. There are no stone-quarries nor economic minerals in the township. Antelopes are found in small herds which water at the lake. On the lake there are large numbers of ducks.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is heavily rolling prairie broken 10. by ridges ranging from fifteen to forty feet in height. The soil is second-class and third-class and consists of clay and sandy loam overlying a clay subsoil which is somewhat gravelly in places. A few marshes were encountered.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—This township is best reached by the Wood Mountain trail which passes through township 11, range 30. The soil is mostly clay, but some lighter soil is found in section 36. The northerly halves of sections 35 and 36 are fairly level and should be good wheat land, but the remainder of the township is very rolling, and parts of sections 22, 23, 14 and 13 are hilly and inclined to be gravel instead of clay, especially on the ridges. This latter part would be more suitable for grazing than farming. There is one large hay meadow in section 35, which at the time of survey (October) was perfectly dry. There is a large deep slough in section 12, and some small sloughs occur in sections 14 and 23. The water is all good, being practically free from alkali. No severe frosts had occurred at the time of survey, as the grass on what had been burned in September was quite green. There is no coal nor wood in the township, but both can be obtained at Wood mountain. There are no stone-quarries nor minerals of economic value. There are a few antelopes, chickens and ducks in the township.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is rolling prairie with a soil consisting of clay and sandy loam over a subsoil of white and brown clay. One small marsh was crossed in section 24. Water is scarce.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—There is a good trail running from Moosejaw to Wood mountain, which crosses the southerly portion of the township. The soil is a heavy clay, except in the northerly part of sections 35 and 36, where it is a light sandy loam. The clay soil should make good wheat land. The north part of the township is rolling prairie, but sections 11, 12, 1 and 2 are gently rolling prairie more suitable for farming. At the time of survey (September) there was no water at all in the township and no indications of summer frosts. There are no coal nor lignite veins in the township, but coal is mined at Wood mountain, in township 4, range 3, west of the third meridian. There are no stone-quarries nor minerals of economic value. Game is scarce, although at times there are a few antelopes and in the sandy portion at the north of the township there are some prairie-chickens.—C. M. Teasdale, D.L.S., 1906.

(East outline.)—The surface along this line is rolling prairie with sandy 12. loam soil overlying a sand and gravel subsoil. The land may be rated generally as third-class. The northeast three-quarters of section 24 is occupied by Johnston lake. Water is scarce.—A. O. Wheeler, D.L.S., 1883.

(Subdivision.)—The land in this township is fair for agricultural purposes. The soil is a sandy loam overlying a sand subsoil and may be rated generally as second-class and third-class.—C. F. Leclerc, D.L.S., 1883.

Range 30.—Concluded.

(North and east outlines.)—The surface along these lines is hilly and broken and forms part of the Missouri coteau. The soil is gravelly clay and sandy loam and may be rated as second- and third-class. The land would be excellent for grazing. Ponds and sloughs are numerous. About one-third of the township is occupied by Johnston lake along the border of which there is a strip of marsh varying from one-half to one mile in width. The water in Johnston lake and in the adjoining marsh is alkaline.—J. Dudderidge, D.L.S., 1882.

The soil in this township is very hard and in many places stony and gravelly, and not well adapted to agriculture. There are some patches of hay land, but the hay is not very good.—J. Warren, D.L.S., 1906.

(See report for township 12, range 28, west of the second meridian.)—C. Rinfret, D.L.S., 1912.

- (East outline.)—This line is on the Missouri coteau, and consequently the land is hilly and broken. The soil is gravelly clay and sandy loam ranking as second and third-class. There are numerous ponds and sloughs all containing fresh water.—J. Dudderidge, D.L.S., 1882.
 - (East outline.)—The surface along this line is rolling prairie with a good clay loam soil which ranks as second-class and third-class. There are numerous ponds and sloughs containing good water.—J. Dudderidge, D.L.S., 1882.

The surface is very rolling in this township and rises sharply to the east. It is, however, thickly settled and the soil is a good loam, producing excellent crops. This township may be reached either from Caron or Mortlach, small towns on the main line of the Canadian Pacific railway.—B. H. Segre, D.L.S., 1912.



